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1A

A new, rapid and precise method for the quantitative separation of copper from bismuth or from bismuth and antimony, and tin. G. Spacu and Despina Petra (Univ. Bucharest, Rumania). *Acad. Rep. Populare Romine, Bul. Stiinț., Ser. : Mat., Fiz., Chim.* 2, 611–18 (1950) (French summary).—To the soln. contg. Cu and Sb ions add 0.75 g. tartaric acid for each 0.1–0.3 g. Sb. Dil. to 70–80 ml., add 2.5–3 ml. pyridine and 0.5 g. solid NH_4SCN gradually while stirring. A green ppt. of $[CuPy_2(SCN)_2]$ is formed immediately. When the ppt. has settled, filter through a filter crucible A$_2$. Wash the ppt. with a soln. of 0.75 g. NH_4SCN + 0.75 g. tartaric acid + 2.5 ml. pyridine + 2.5 ml. H_2O and then 7–8 times with 2–3 ml. of a soln. contg. 0.13 g. NH_4SCN + 2 ml. pyridine + 48 ml. H_2O in 20 ml. 96% EtOH. Finally wash with abs. EtOH and Et_2O contg. a small amt. of pyridine and dry for 20 min. in vacuo at room temp. If Bi, Sb, and Sn are present in the Cu alloy or mineral, treat with hot concd. HCl, introduce a few ml. H_2O_2 dropwise, heat until all metals are dissolved and the excess H_2O_2 removed. Add 0.75 g. tartaric acid, dilute to 75 ml., and add 5 ml. pyridine and 0.5 g. NH_4SCN with stirring. Wash as described above. Gerhard Auffleger

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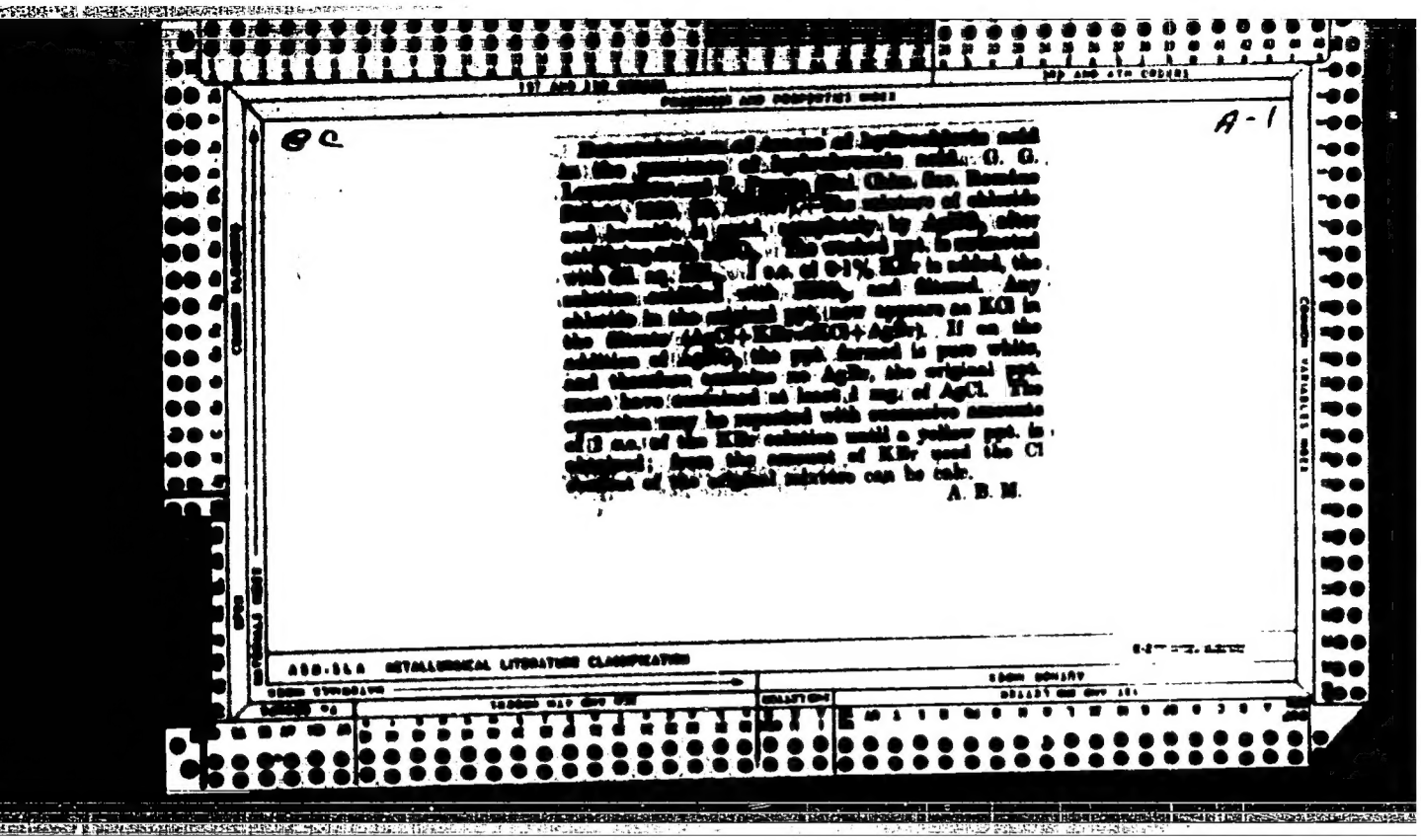

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PHASE I BOOK EXPLOITATION 375

Katsnel'son, Genrikh Mayorovich; Saf'yan, Matvey Matveyevich; Chekmarev, Aleksandr Petrovich; Maly, Georgiy Ivanovich

Prokatka tolstykh listov s povyshennoy tochnost'yu (Rolling of Steel Plate to Close Limits) Moscow, Metallurgizdat, 1957. 125 p. 4,000 copies printed.

Ed. (title page): Chekmarev, A. P., Active Member, Ukrainian Academy of Sciences, Doctor, Professor; Ed. (inside book): Pirskiy, F. N.; Ed. of Publishing House: Valov, N. A.; Tech. Ed.: Karasev, A. I.

PURPOSE: This book is intended for engineers and technicians in rolling mills. It can also serve as a manual for researchers and students of vuzes.

COVERAGE: The book deals with the hot rolling of steel plate to close limits on a three-high Lauth mill. Various factors affecting the precision of rolled plate are discussed. The rolling of plate is subject to variables such as: temperature of metal, mill spring, roll design, and other characteristics inherent in the material and equipment.

Card 1/3

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Rolling of Steel Plate to Close Limits 375

The author investigates each of these problems and advances various solutions. There are numerous diagrams and formulae. 6 Soviet references.

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Card 2/3

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AVAILABLE: Library of Congress (TS 360.C45)

Card 3/3

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(A) L 65136-65 EWT(d)

ACCESSION NR: AP5021631 UR/0286/65/000/013/0112/0112

AUTHORS: Vasilenko, N. T.; Vasil'yev, Yu. P.; Orlov, Yu. V.; Pirskiy, P. K.

TITLE: A hinge for connecting pontoons. Class 65, No. 172643

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 13, 1965, 112

TOPIC TAGS: pontoon, mechanical fastener

ABSTRACT: This Author Certificate presents a hinge for connecting pontoons, made in the form of two brackets fixed to the flanges of adjacent pontoons and joined by an axle (see Fig. 1 on the Enclosure). To facilitate and expedite joining pontoons for floating in waves, the axle of the hinge is fixed on two radially-spherical bearings pressed into the bracket. In its central portion, the cross section of the axle is square. This square portion enters into a slot of the other bracket which also has a slot perpendicular to the first one. The second slot forms a seat for a wedge which locks the hinge when the pontoons are connected. Orig. art. has: 1 figure.

ASSOCIATION: none

SUBMITTED: 31Mar64 ENCL: 01 SUB CODE: IE

NO REF SOV: 000 OTHER: 000

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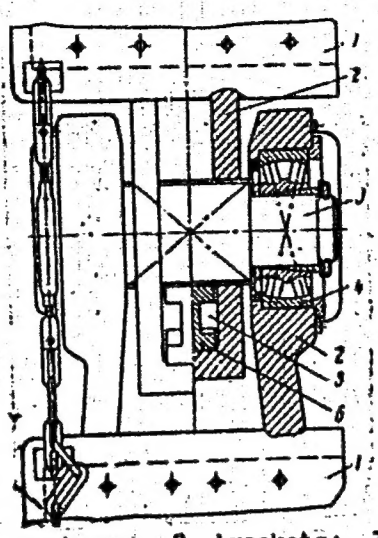

Fig. 1. 1- pontoons; 2- brackets; 3- hinge axis; 4- radially-spherical bearings; 5- slot; 6- wedge

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PIRSZTEL, Jerzy, inz.

Behavior of voltage transformers in [illegible] kv networks with [illegible] neutral point. Energetyka Pol 17 no. [illegible] 63.

1. Zaklad Energetyczny, Gdansk.

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IMIELIŃSKI, Jan, mgr inz.; PIKOŻTEL, Jerzy, inz.; KUSOWSKI, Kazimierz

Methods of decreasing the number of possible 15 kv cable faults. Energetyka Pol 18 no. 2: 44-45-48 F '64.

1. Zaklad Energetyczny, Gdansk.

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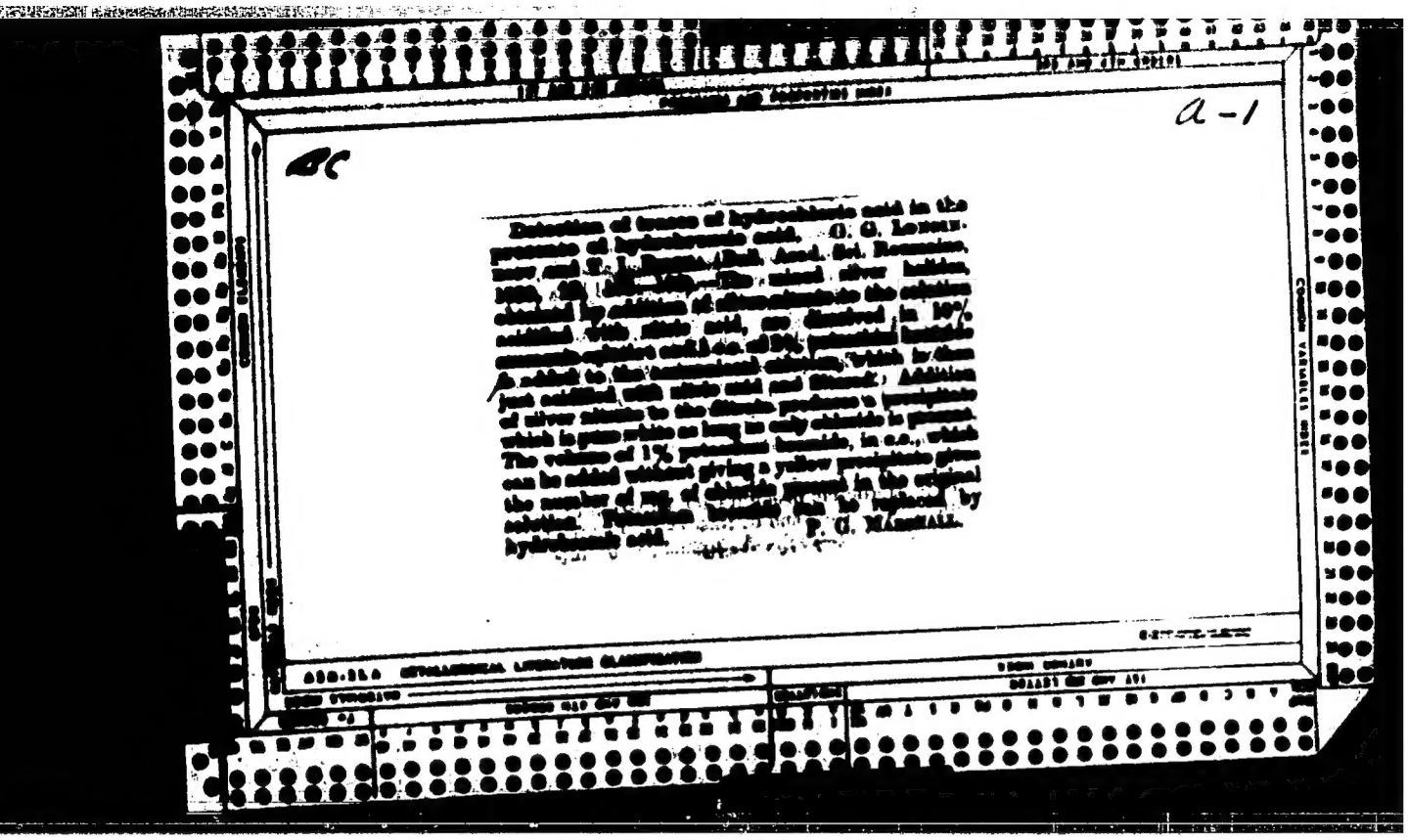

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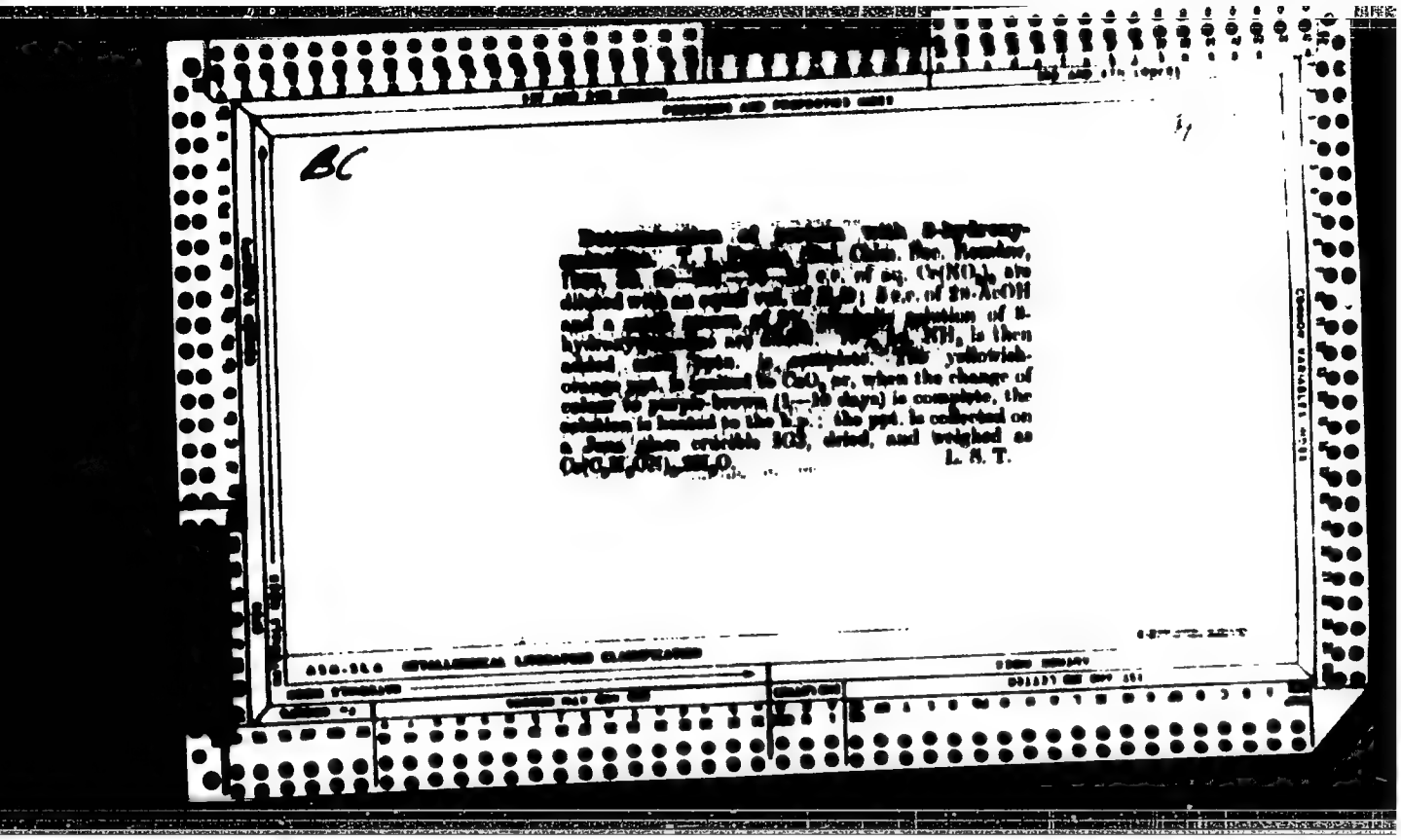

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L. S. T.

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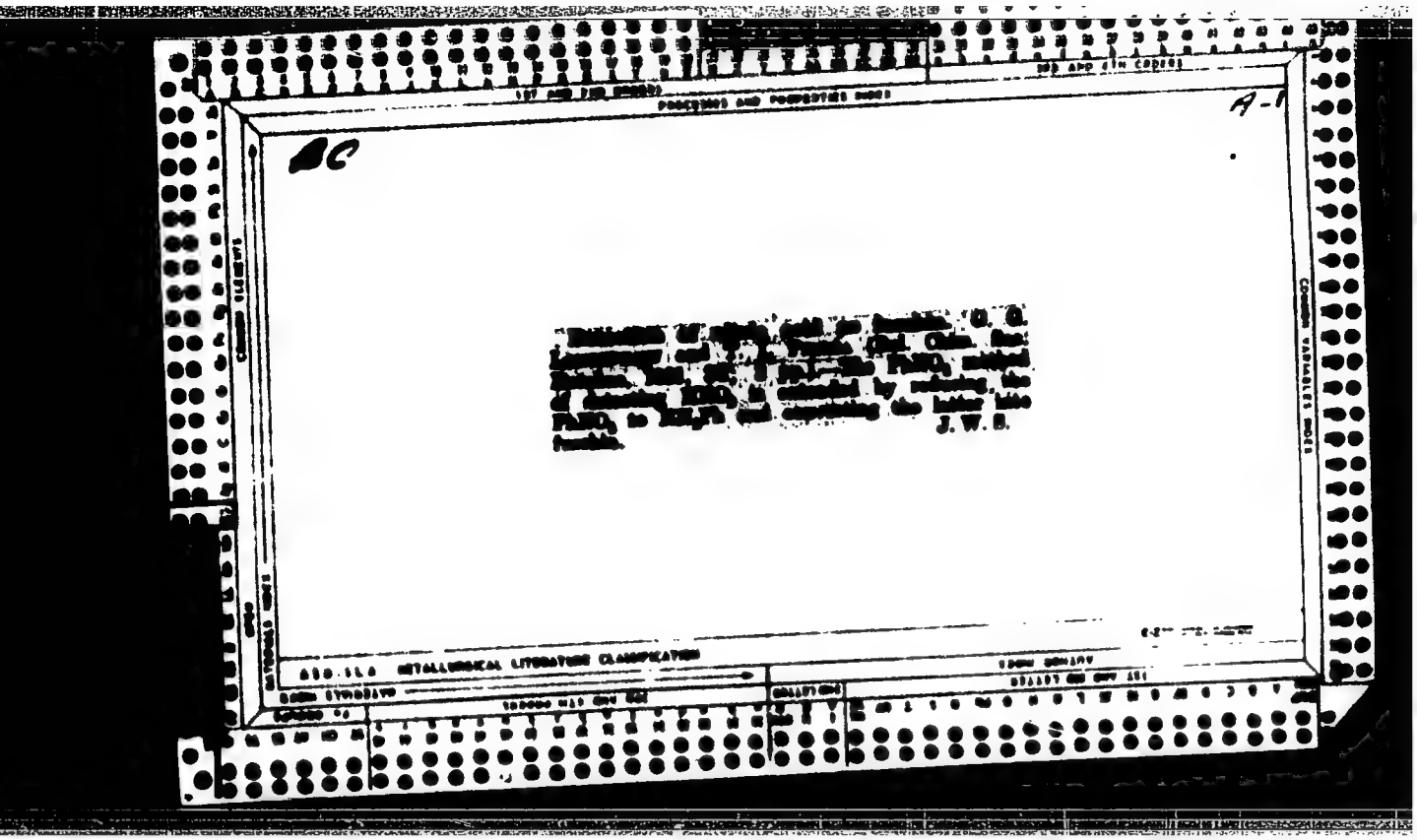

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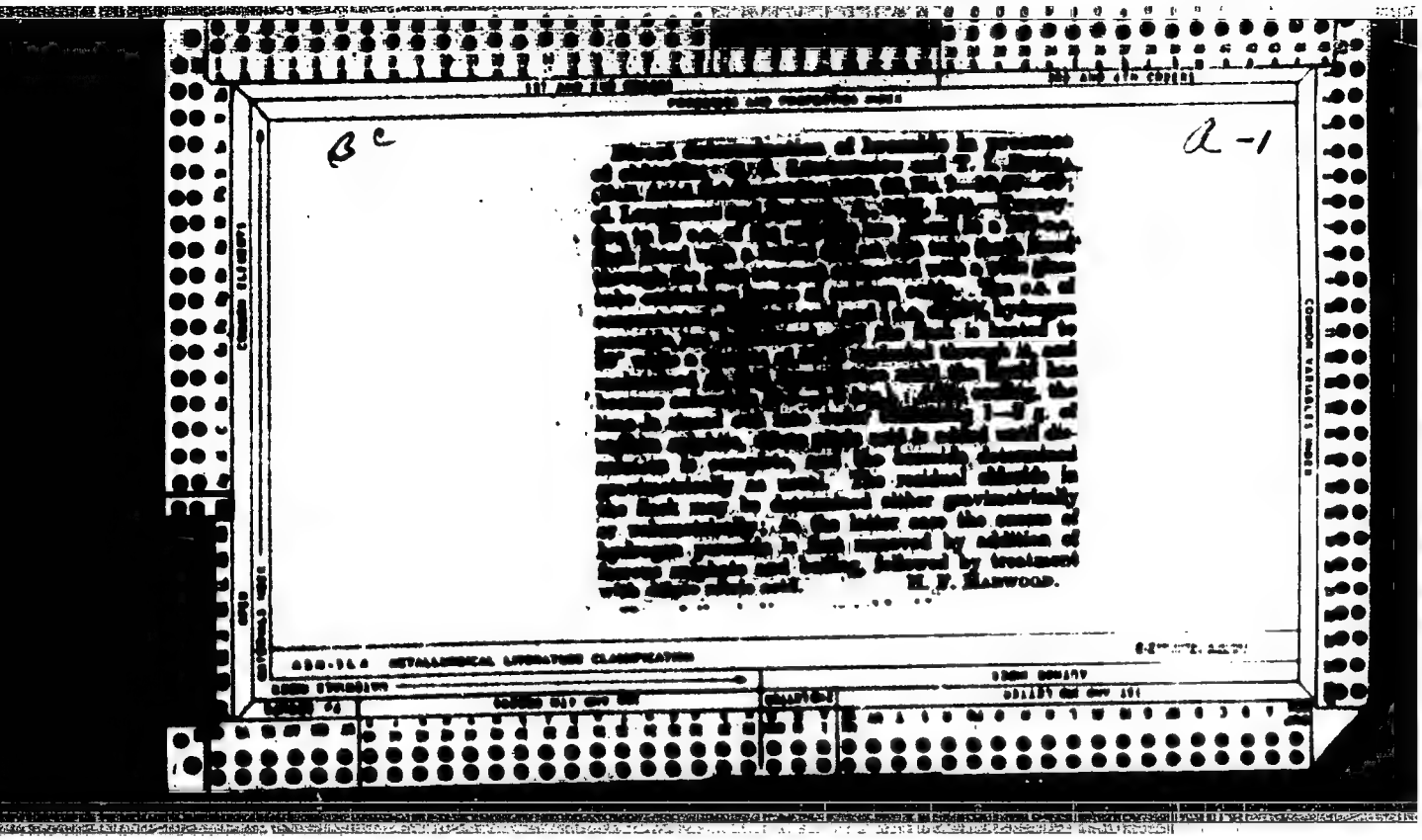

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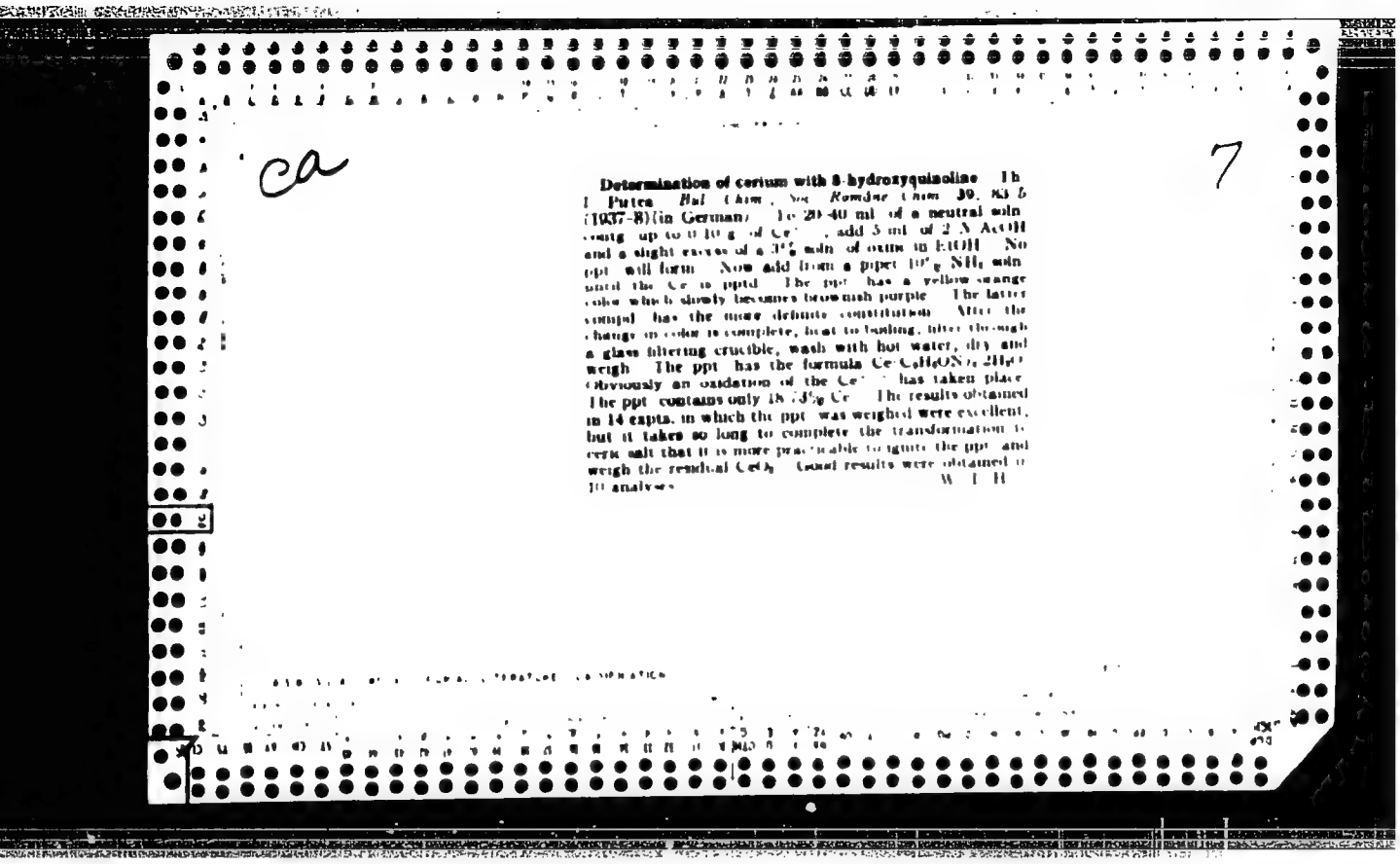

ca

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Determination of cerium with 8-hydroxyquinoline. Th. J. Putea. *Bul. Chim. Soc. Romîne Chim.* **39**, 83–6 (1937–8) (in German). To 20–40 ml. of a neutral soln. containg. up to 0.10 g. of Ce^{+++}, add 5 ml. of 2 *N* AcOH and a slight excess of a 3% soln. of oxine in EtOH. No ppt. will form. Now add from a pipet 10% NH_4 soln. until the Ce is ppted. The ppt. has a yellow orange color which slowly becomes brownish purple. The latter compd. has the more definite constitution. After the change in color is complete, heat to boiling, filter through a glass filtering crucible, wash with hot water, dry and weigh. The ppt. has the formula $Ce(C_9H_6ON)_4 \cdot 2H_2O$. Obviously an oxidation of the Ce^{+++} has taken place. The ppt. contains only 18.73% Ce. The results obtained in 14 expts. in which the ppt. was weighed were excellent, but it takes so long to complete the transformation to ceric salt that it is more practicable to ignite the ppt. and weigh the residual CeO_2. Good results were obtained in 10 analyses.

W. I. H.

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Detection of nitric acid by the formation of fuchsin. G. G. [illegible] and [illegible] *Bol. chim. soc. romîne chim.* **36**, Nos. 1-6, 3 pp. (1933). The test depends upon the formation of $C_6H_5NO_2$ by treatment with a little benzene and concd. H_2SO_4, reducing the nitrobenzene to aniline and making the aniline react with $HgCl_2$ to form fuchsin. To a little of the substance in a test tube add 2-3 drops of benzene and 1 cc. of concd. H_2SO_4. With the temp. of the mixt. approx. 80° add a little water and introduce powd. Zn little by little. After the $C_6H_5NO_2$ has been reduced to $C_6H_5NH_2$, divide the soln. into 2 parts and test one portion for aniline by the reaction with $CaOCl_2$. To the other portion add a little solid $HgCl_2$ and evap. just to dryness under the hood. Continue heating carefully until a reddish green coloration appears on the sides of the tube. Cool, add a little EtOH and the presence of fuchsin will be shown by the reddish violet color of the soln. W. J. H.

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MA

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The Quantitative Estimation of Cerium with Ortho-oxyquinoline [illegible] (In German.) Dilute to [illegible] of water, acidify with [illegible] and add a slight excess of 3 % alcoholic solution of ortho-oxyquinoline for NH_4OH solution drop by drop until precipitation is complete. When the cerium oxine precipitate is settled and to remain until it has become entirely purple brown in colour then bring to the boil and filter through a glass filter crucible No.3, dry, and weigh. The dried precipitate has the composition $(C_9H_6ON)_3Ce.2H_2O$. The colour change takes place in 1 to days. A much quicker way with the same accuracy is to filter the hot precipitate immediately after formation through a quantitative filter, wash with hot water and ignite to [illegible].

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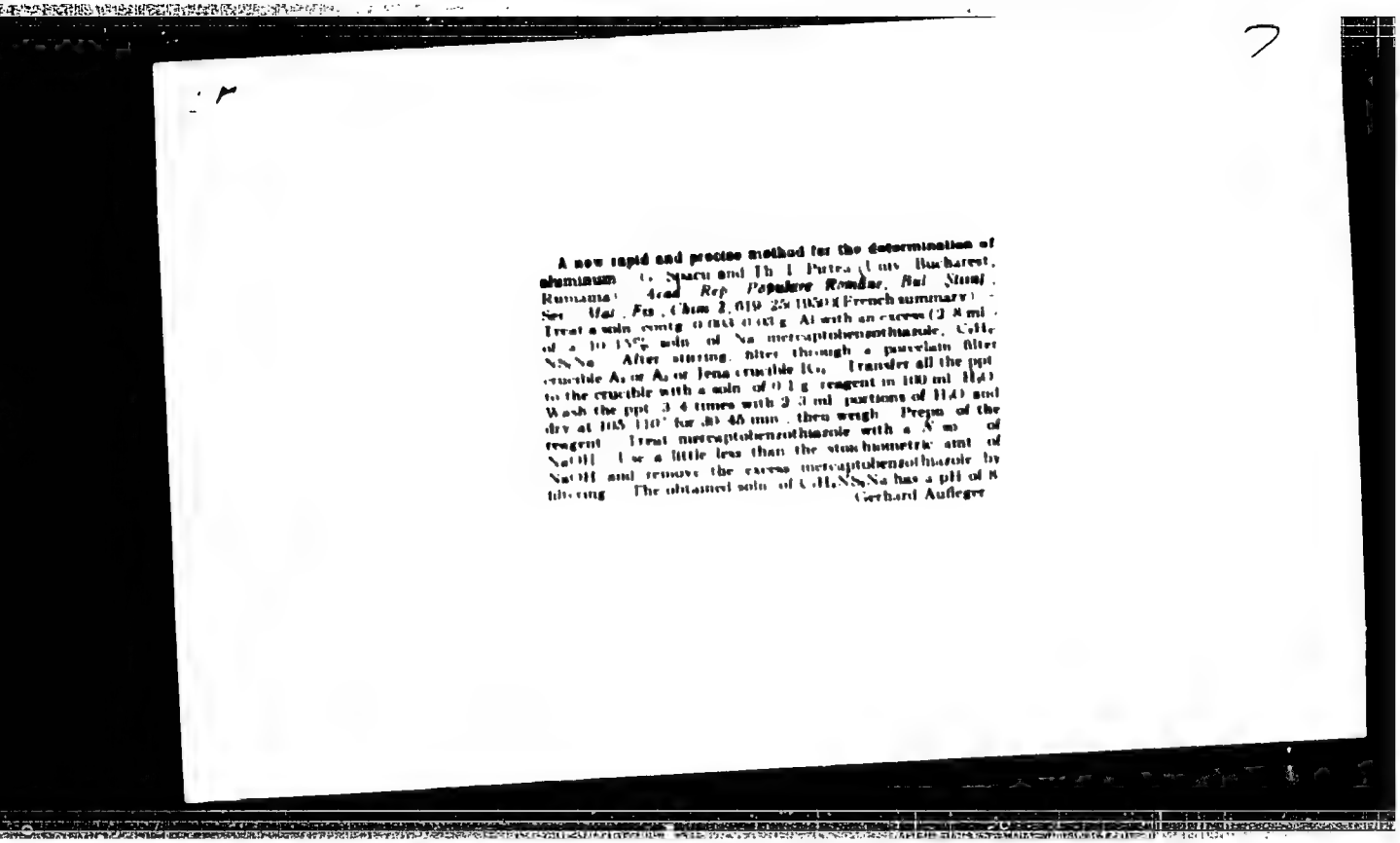

A new rapid and precise method for the determination of aluminum. C. Spacu and Th. I. Putea (Univ. Bucharest, Romania). *Acad. Rep. Populare Romîne, Bul. Stiinț. Sec. Mat. Fiz., Chim.* 2, 619-25 (1950) (French summary). Treat a soln. contg. 0.0035-0.035 g. Al with an excess (2 ml.) of a 10-15% soln. of Na mercaptobenzothiazole, C_6H_4NSNa. After stirring, filter through a porcelain filter crucible A 15 or Jena crucible 1G4. Transfer all the ppt. to the crucible with a soln. of 0.1 g. reagent in 100 ml. H_2O. Wash the ppt. 3-4 times with 2-3 ml. portions of H_2O and dry at 105-110° for 30-45 min., then weigh. Prepn. of the reagent: Treat mercaptobenzothiazole with a N soln. of NaOH. Use a little less than the stoichiometric amt. of NaOH and remove the excess mercaptobenzothiazole by filtering. The obtained soln. of C_6H_4NSNa has a pH of 8.

Gerhard Auflegre

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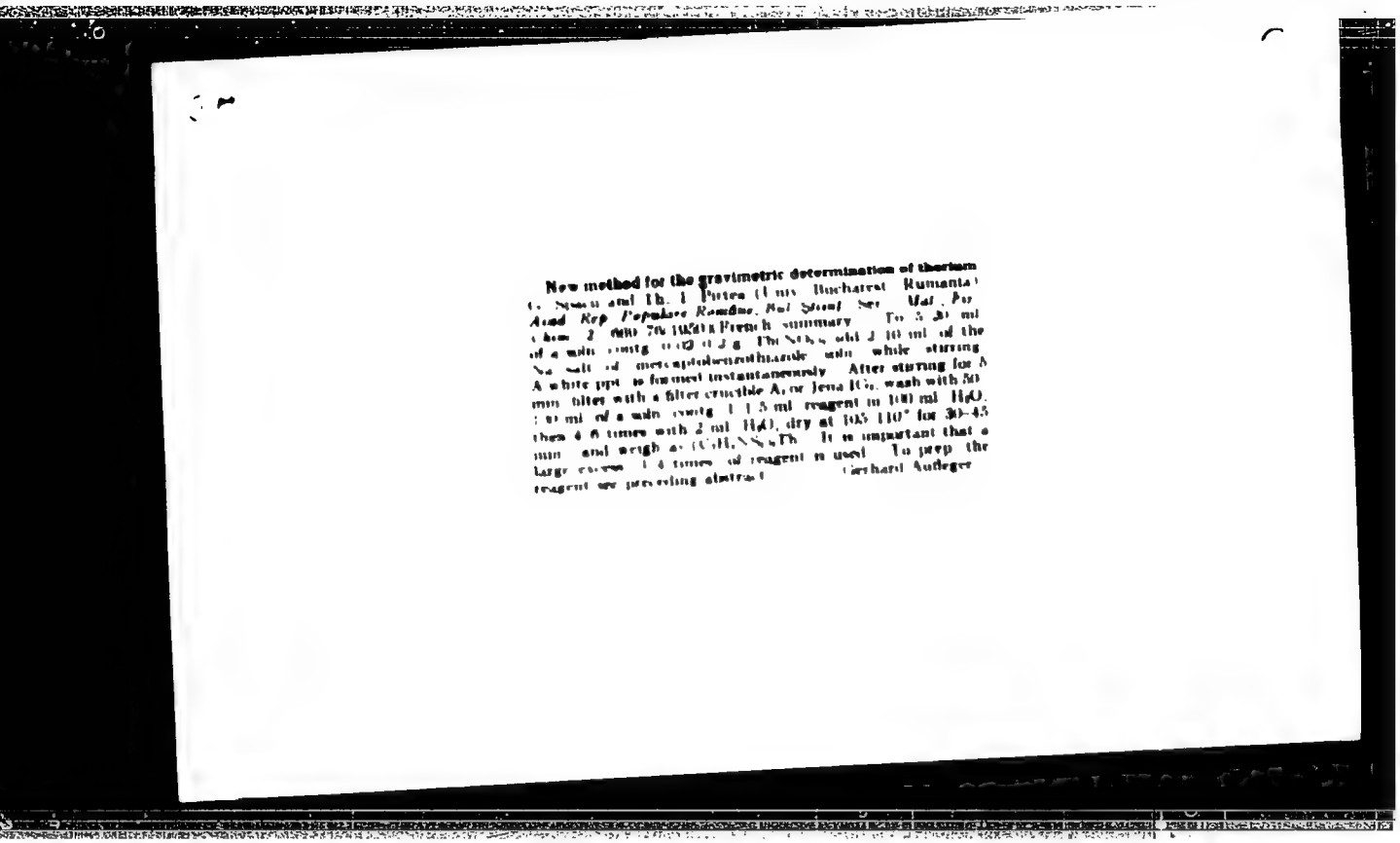

New method for the gravimetric determination of thorium

C. Spacu and Th. I. Pirtea (Univ. Bucharest, Rumania) *Acad. Rep. Populare Romîne, Mat. Stiint. Ser. Mat., Fiz. Chim.* 2, 669-76 (1952). French summary. To 5-20 ml. of a soln. contg. 0.02-0.2 g. Th(NO$_3$)$_4$ add 2-10 ml. of the Na salt of meta-sulfobenzenethiazide soln. while stirring. A white ppt. is formed instantaneously. After stirring for 5 min. filter with a filter crucible A, or Jena 1G$_4$, wash with 50 ml. H$_2$O, 5 ml. of a soln. contg. 1-1.5 ml. reagent in 100 ml. H$_2$O, then 4-6 times with 2 ml. H$_2$O, dry at 105-110° for 30-45 min. and weigh as (C$_7$H$_4$NS$_2$)$_4$Th. It is important that a large excess (4 times) of reagent is used. To prep. the reagent see preceding abstract. Gerhard Ludeger

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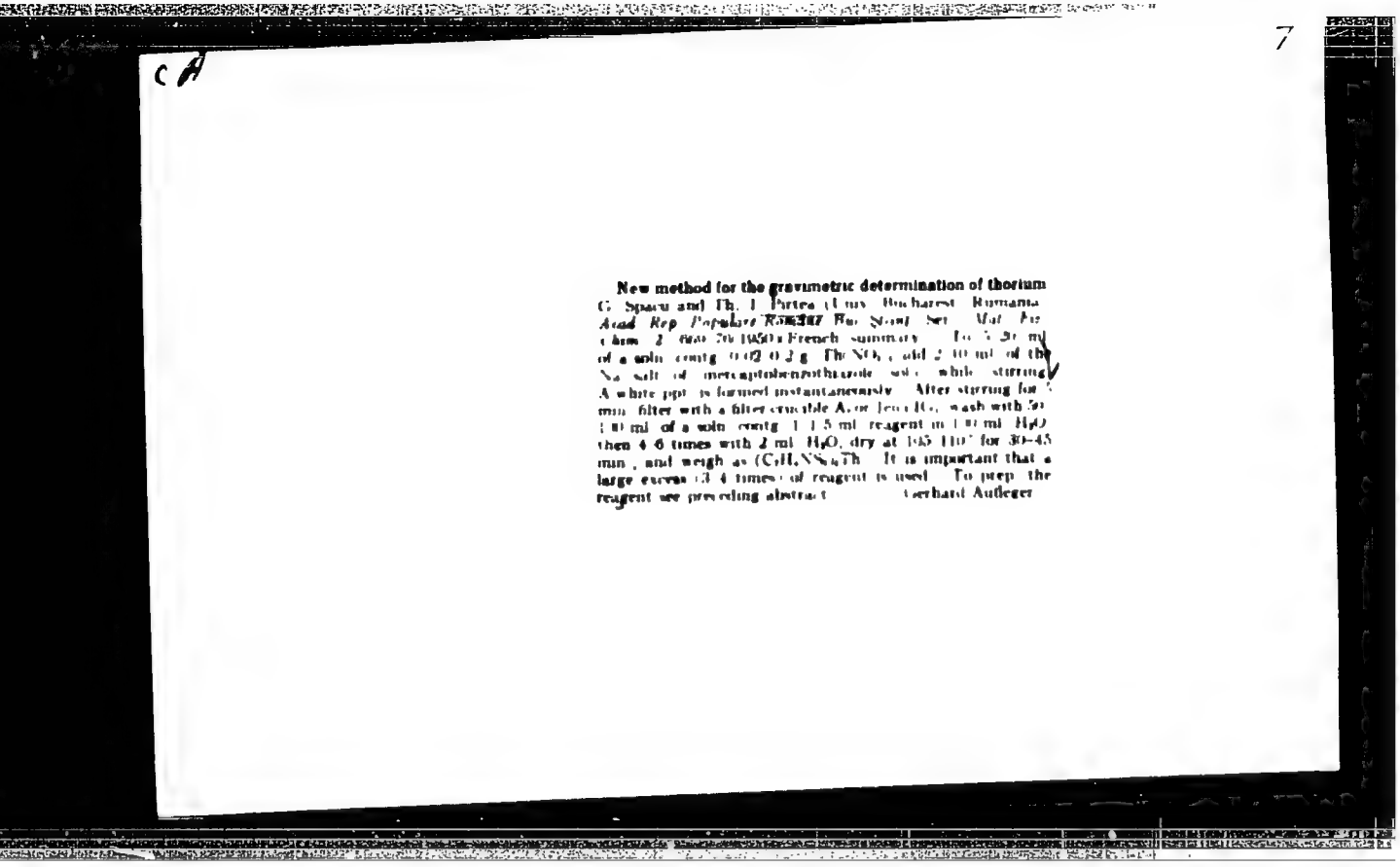

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CA

New method for the gravimetric determination of thorium

(C. Spacu and) Th. I. Dirtea (Univ. Bucharest, Rumania). *Acad. Rep. Populare Romîne, Bul. Stiinț. Sec. Mat. Fiz. Chim.* 2 (No. 2): 79-104(1950) (French summary). To 5-25 ml. of a soln. contg. 0.02-0.2 g. $Th(NO_3)_4$ add 2-10 ml. of the Na salt of mercaptobenzothiazole and, while stirring, a white ppt. is formed instantaneously. After stirring for 5 min. filter with a filter crucible A or [illegible], wash with 50-100 ml. of a soln. contg. 1-1.5 ml. reagent in 100 ml. H_2O, then 4-6 times with 2 ml. H_2O, dry at 105-110° for 30-45 min., and weigh as $(C_7H_4NS_2)_4Th$. It is important that a large excess (3-4 times) of reagent is used. To prep. the reagent see preceding abstract. Gerhard Aufleger

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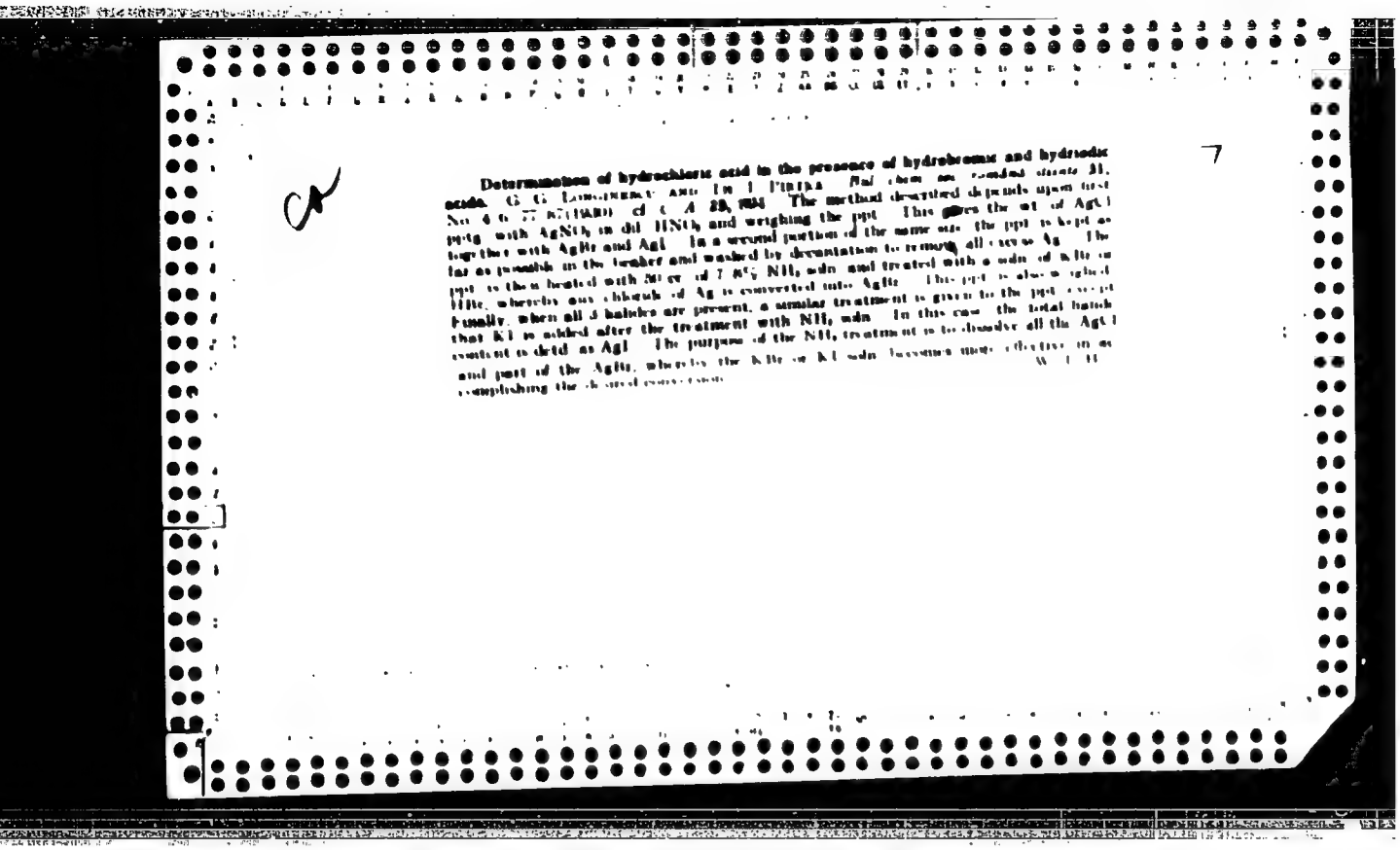

Determination of hydrochloric acid in the presence of hydrobromic and hydriodic acids. G. G. [illegible] and [illegible] Pinkus. *Mal chem ne rendus* [illegible] 31, No. 4 (in French) (1934). The method described depends upon treating with $AgNO_3$ in dil HNO_3 and weighing the ppt. This gives the wt. of AgCl together with AgBr and AgI. In a second portion of the same size the ppt is kept as far as possible in the darker and washed by decantation to remove all excess Ag. The ppt. is then heated with Mg or Al + NH_4 soln. and treated with a soln. of KBr or HBr, whereby any chloride of Ag is converted into AgBr. The ppt. is also weighed. Finally, when all 3 halides are present, a similar treatment is given to the ppt. except that KI is added after the treatment with NH_4 soln. In this case the total halide content is dried as AgI. The purpose of the NH_4 treatment is to dissolve all the AgCl and part of the AgBr, whereas the KBr or KI soln. [illegible] completing the [illegible]

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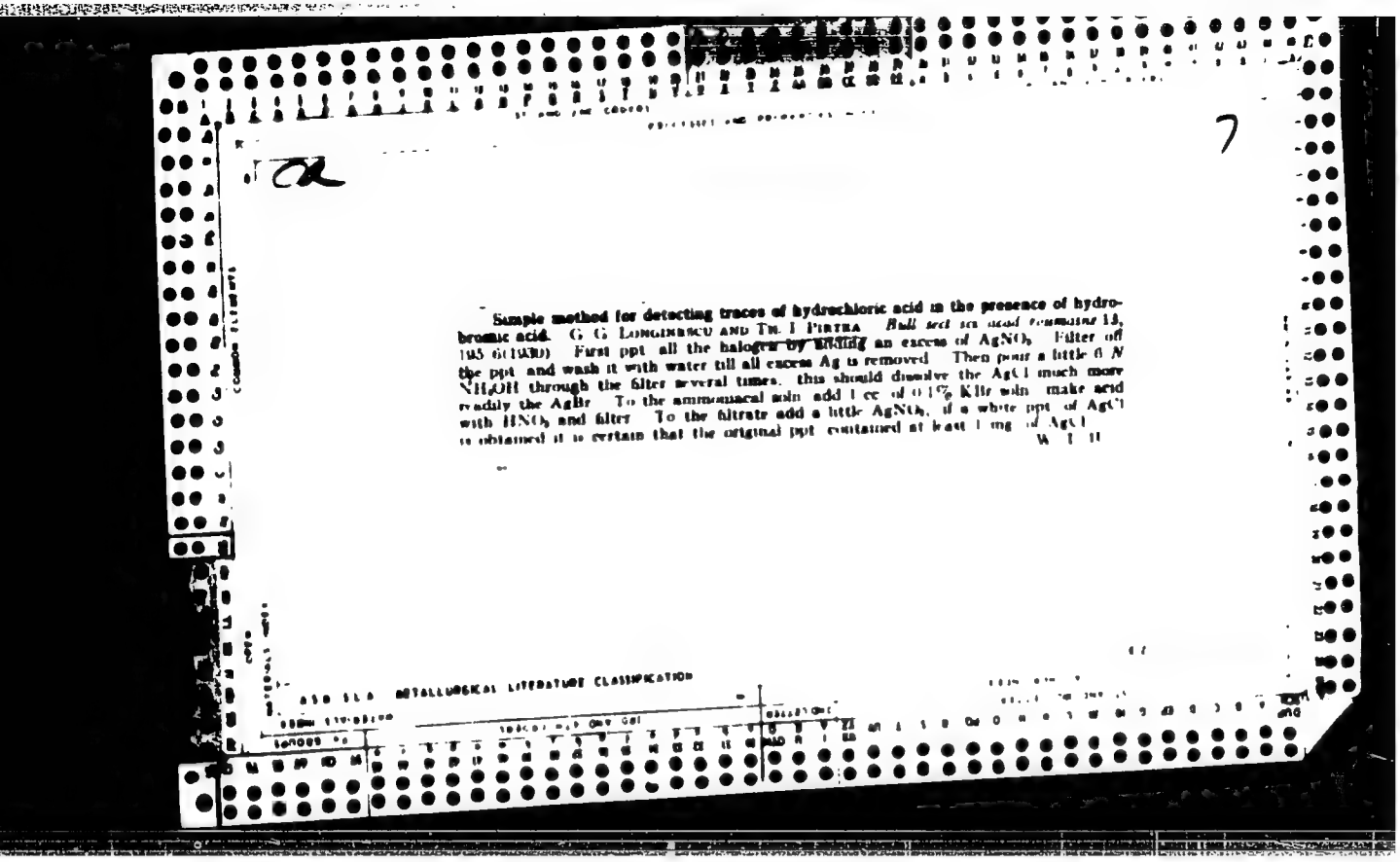

Sample method for detecting traces of hydrochloric acid in the presence of hydrobromic acid. G. G. Longinescu and Th. I. Pirtea. *Bull. acid. roumaine* 15, 195-6(1930). First ppt. all the halogens by adding an excess of $AgNO_3$. Filter off the ppt. and wash it with water till all excess Ag is removed. Then pour a little 6 *N* NH_4OH through the filter several times; this should dissolve the AgCl much more readily the AgBr. To the ammoniacal soln. add 1 cc. of 0.1% KBr soln., make acid with HNO_3 and filter. To the filtrate add a little $AgNO_3$; if a white ppt. of AgCl is obtained it is certain that the original ppt. contained at least 1 mg. of AgCl.

W. I. H.

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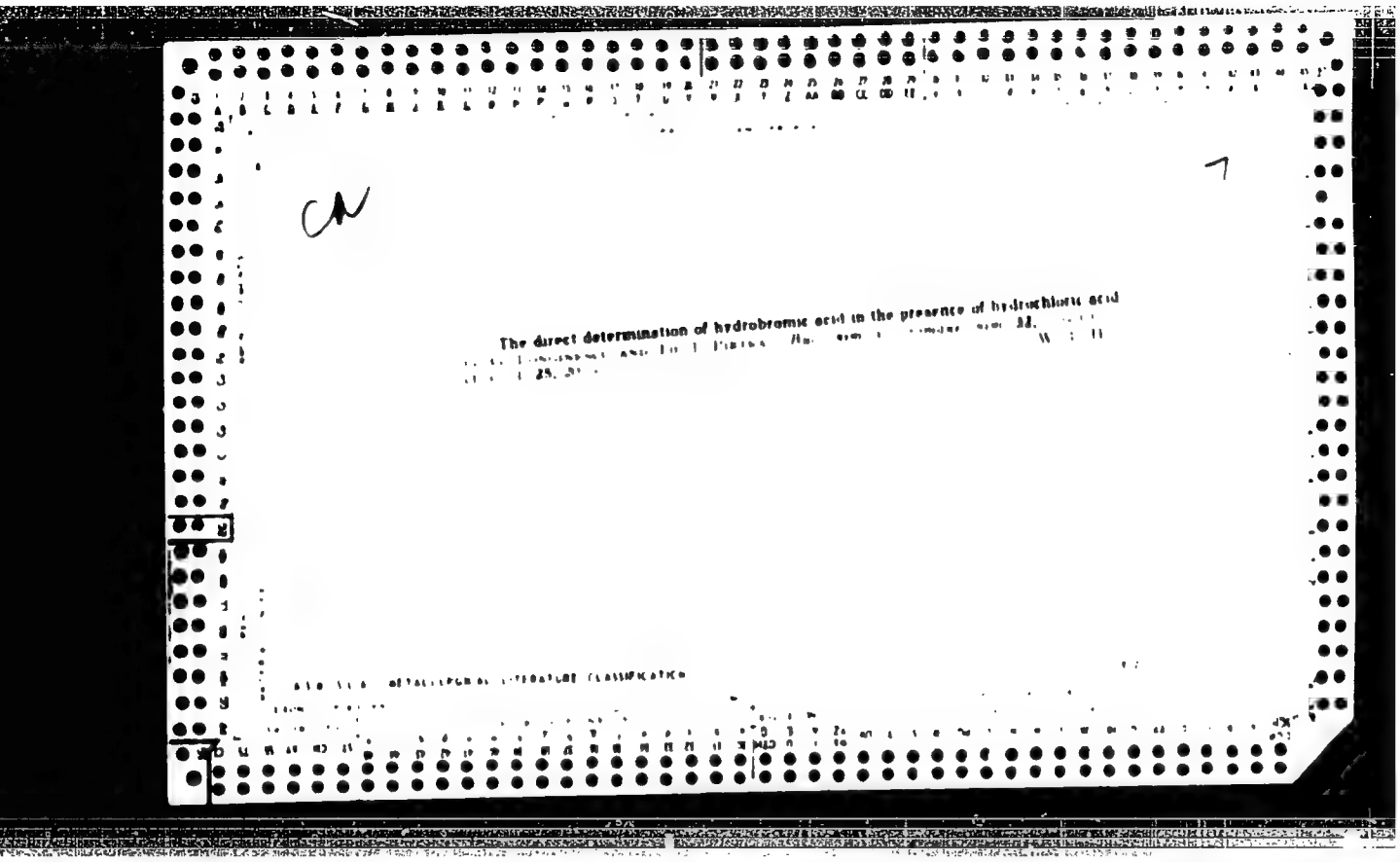

The direct determination of hydrobromic acid in the presence of hydrochloric acid

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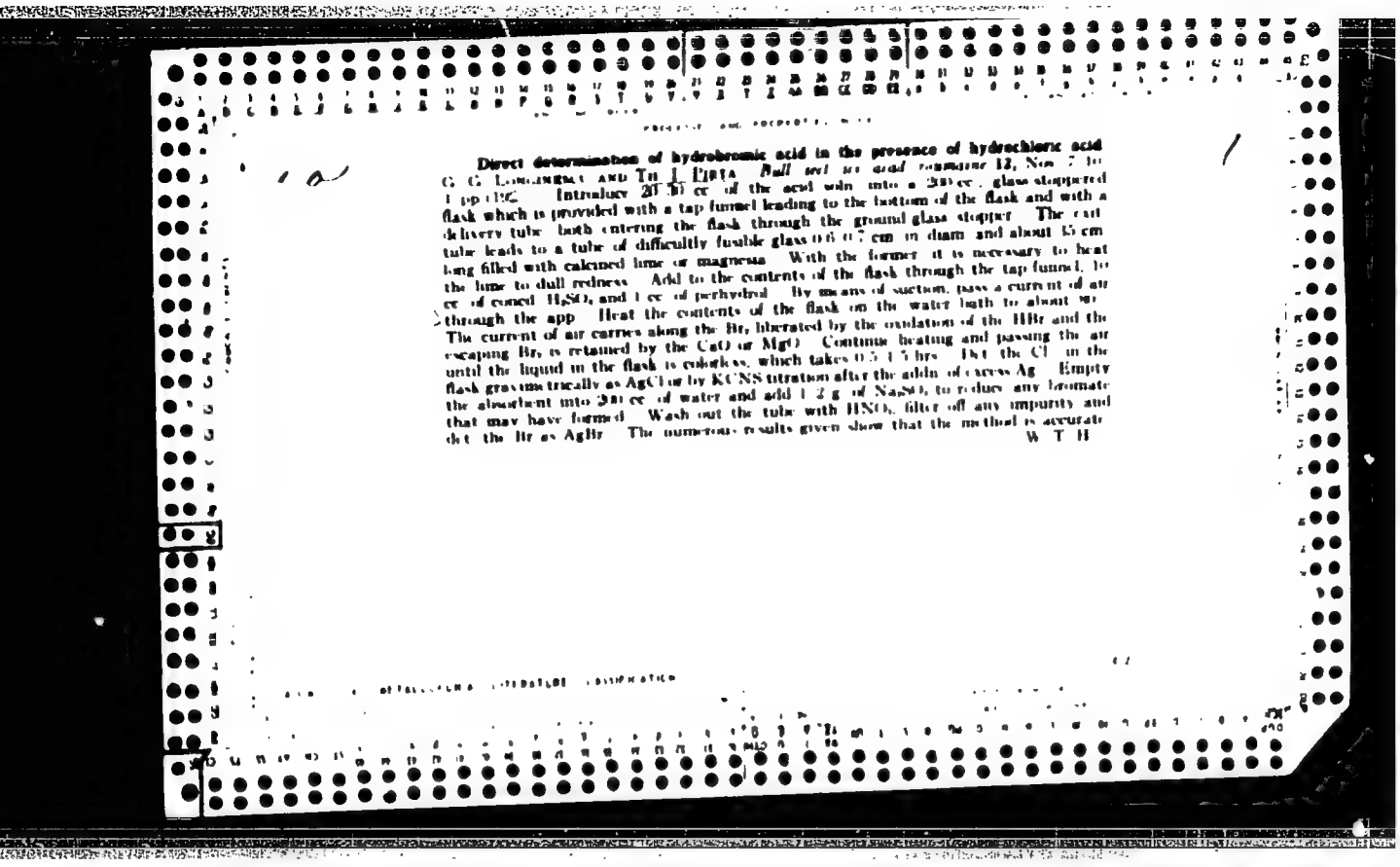

Direct determination of hydrobromic acid in the presence of hydrochloric acid

G. G. [illegible] AND TH. J. PIRIA *Bull. soc. sci. acad. roumaine* 12, No. 2 [illegible] 1930. In a flask 20–30 cc. of the acid soln. into a 250-cc. glass-stoppered flask which is provided with a tap funnel leading to the bottom of the flask and with a delivery tube, both entering the flask through the ground glass stopper. The exit tube leads to a tube of difficultly fusible glass 0.6–0.7 cm. in diam. and about 15 cm. long filled with calcined lime or magnesia. With the former it is necessary to heat the lime to dull redness. Add to the contents of the flask through the tap funnel, 10 cc. of concd. H_2SO_4, and 1 cc. of perhydrol. By means of suction, pass a current of air through the app. Heat the contents of the flask on the water bath to about 90°. The current of air carries along the Br, liberated by the oxidation of the HBr and the escaping Br is retained by the CaO or MgO. Continue heating and passing the air until the liquid in the flask is colorless, which takes 0.5–1.5 hrs. Det. the Cl in the flask gravimetrically as AgCl or by KCNS titration after the addn. of excess Ag. Empty the absorbent into 250 cc. of water and add 1–2 g. of Na_2SO_3, to reduce any bromate that may have formed. Wash out the tube with HNO_3, filter off any impurity and det. the Br as AgBr. The numerous results given show that the method is accurate.

W. T. H.

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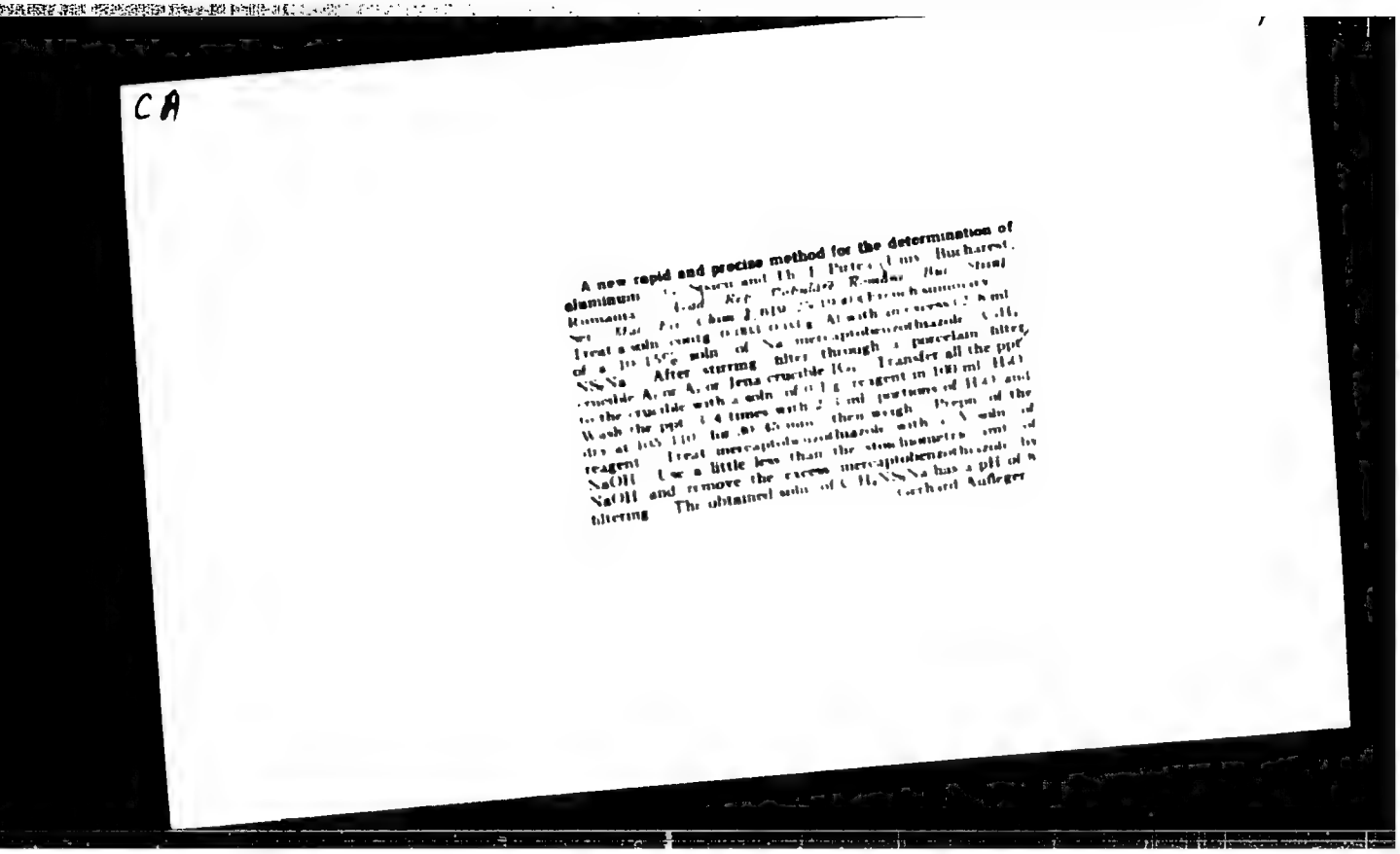

CA

A new rapid and precise method for the determination of aluminum

Romania

Treat a soln

of a

NSNa After stirring

crucible A

to the crucible

Wash the ppt

reagent

NaOH

NaOH and remove the excess

filtering

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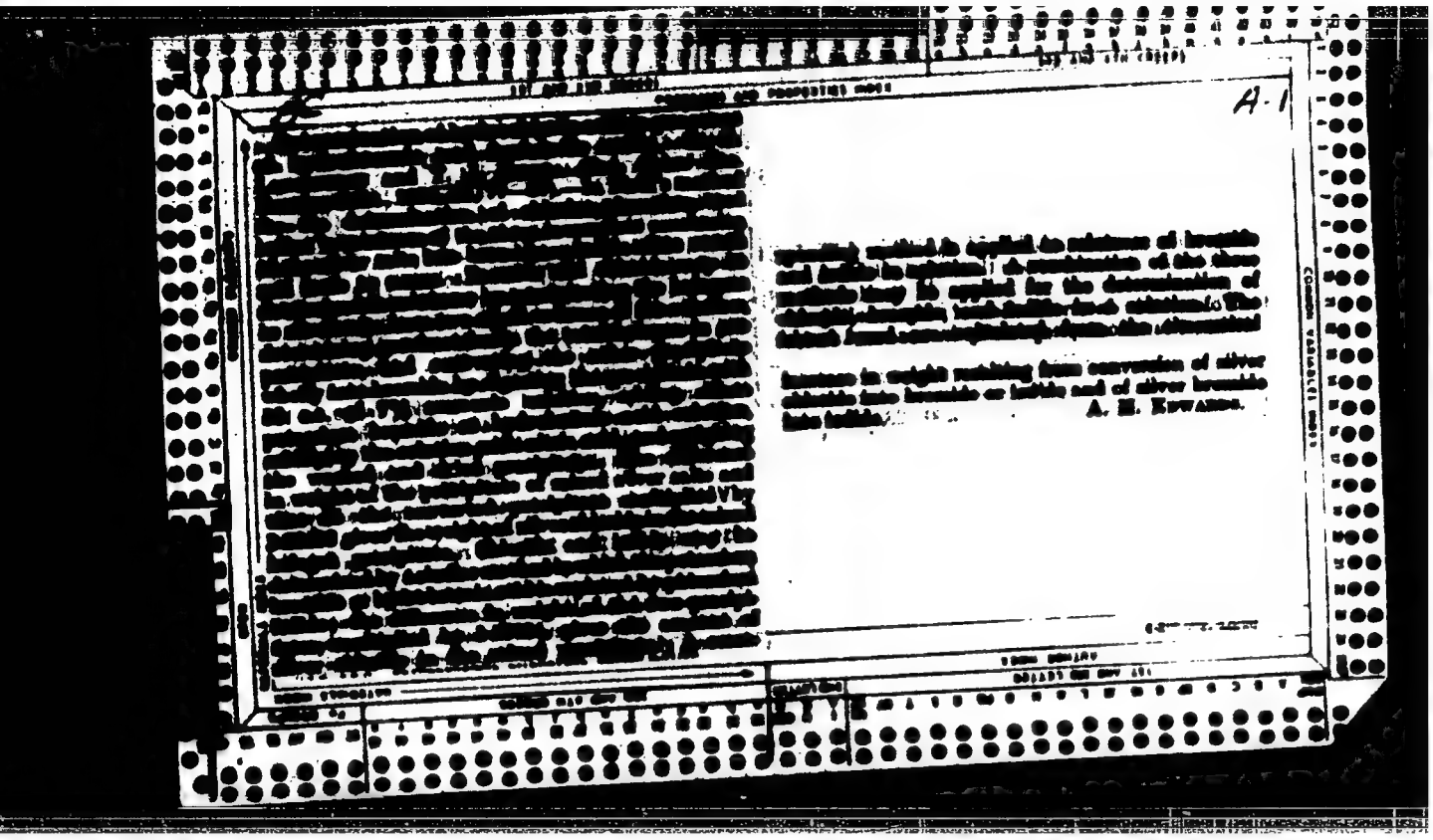

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A. E. Ewbank.

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[redacted]

[redacted] terpiinae th[redacted] agents [redacted] insecticides. [redacted].

Academia Republicii Populare Romine. [redacted] Studii [redacted], Bucuresti, Romania. Vol. [redacted], no. [redacted], 1959.

Monthly List of East European Accessions (EEA) Vol. [redacted], no. 7, July [redacted].

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PIRTEA, D.

2093. New gravimetric method for the rapid estimation of copper? D. Pirtea, E. Dorato and S. Zelig. *Stud. Cercet. Chim., Bucharest*, 1955, 3 (3–4), 235–236.—Copper is ppt'd. quant. as $[CuPy_4](ClO_4)_2$ by the addition of pyridine and solid $NaClO_4$ at room temp. After filtration, the ppt. is finally washed with ether and is dried in a vacuum desiccator. The analysis can be performed in < 15 min.
J. H. Watson

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

PIRTEA, D.

6

1213. New gravimetric methods for the rapid estimation of the elements nickel, cobalt and cadmium. D. Pirtea, G. Dumitrescu and N. Melencu. *Stud. Cercet. Chim., Bucharest*, 1955, 3 [3–4], 237–242.—Nickel, Co and Cd are each pptd. quant. as the complex $[MPy_4][Cr_4O_7]$ by the addition of pyridine and $K_2Cr_2O_7$ soln. at room temp. After filtration, the ppt. are washed with ethanol and with ether, and are dried in a vacuum desiccator. Each analysis can be performed in 45 to 60 min.

J. H. WATON

fra MIT

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

PIRTEA, DESPINA.

The separation and gravimetric determination of copper in the presence of iron or aluminum or of both of these metals. Gh. Spacu and Despina Pirtea. *Comun. Acad. Rep. Populare Romîne* 3, 77–82(1953). The method of S. and Dick (*C.A.* 31, 2630), consisting in the ppn. of Cu as a pyridine complex $[Cupy_2(SCN)_2]$, was used for the sepn. of Cu from Fe^{+++} and Al^{+++}, which were kept in soln. by tartaric acid (cf. *C.A.* 45, 7912a). The Fe^{+++} and Al^{+++} ions were then ppd. from the filtrate with 8-hydroxyquinoline. The method was rapid and precise. P. Kertesz

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

LIBERA, L.; DUMITRESCU, ..; VLAICU, N.

New gravimetric methods for rapid determination of the elements nicke., cobalt, and cadmium, p. 238. Academia Republicii opulare Romine. STUDII SI CERCETARI DE CHIMIE. Bucuresti. Vol. 3, no. 3-4, July/Dec. 1955.

So. Eas European Accessions List Vol. 5, No. 9 eptember, 19[illegible]

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

PIRTEA, D. ; ALBESC", I.

The macro-and microgravimetric method of determining the mercury in substances for the protection of plants. p. 137.

STUDII SI CERCETARI DE CHIMIE. Bucuresti, Rumania
Vol. 7, No. 1, 1959.

Monthly List of East European Accession (EEAI). LC, Vol. 8, No. 9, Sept. 1959
Uncl.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8"

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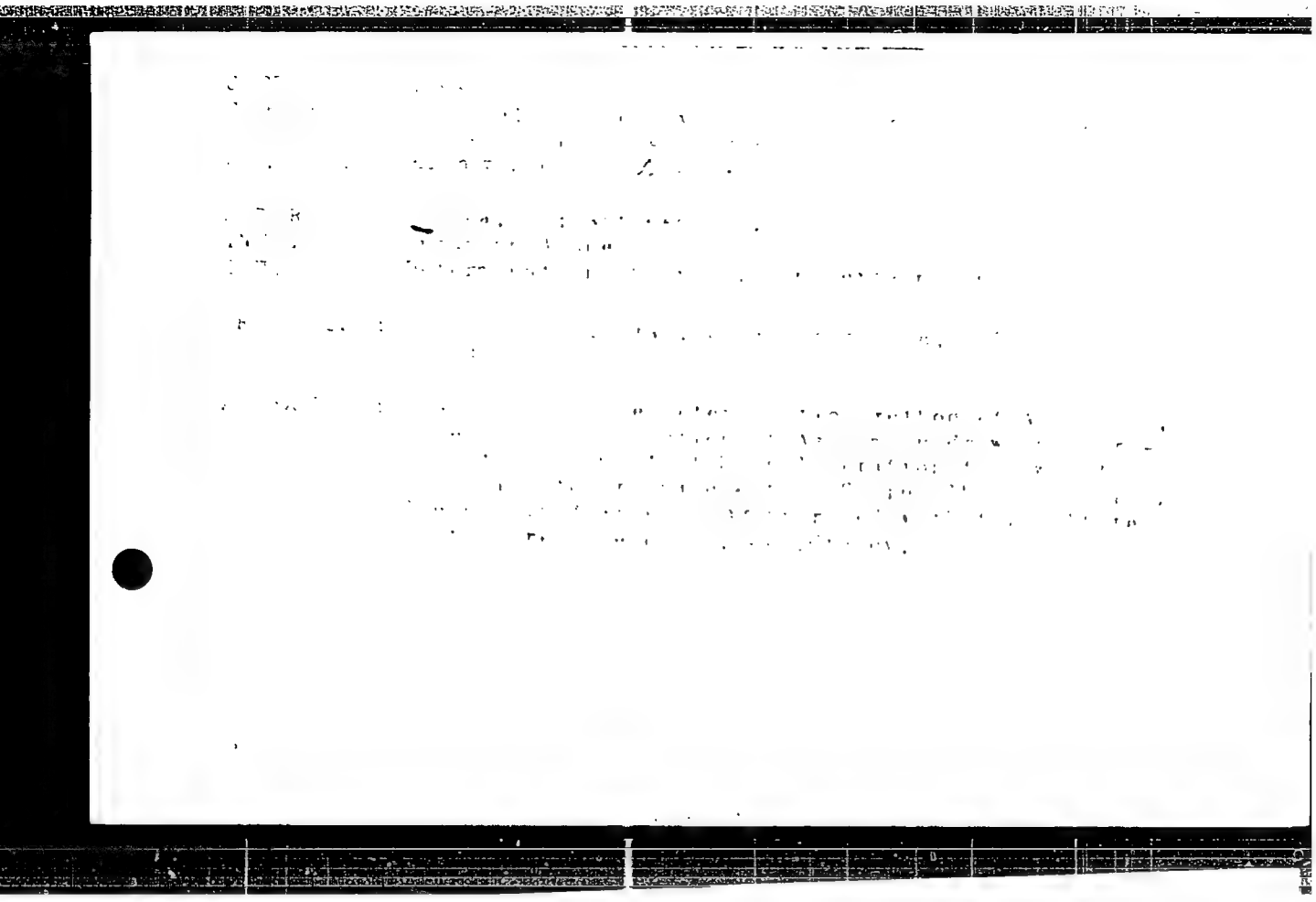

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

L 34899-66 EWP(t)/ETI IJP(c) JD
ACC NR: AP6026618 SOURCE CODE: RU/0003/65/016/005/0288/0289

AUTHOR: Pirtea, T. I.

ORG: Laboratory for Analytical Chemistry, Faculty of Chemistry, Bucharest University (Laboratorul de chimie analitica, Facultata de chimie, Universitatea Bucuresti)

TITLE: New methods for the gravimetric determination of cadmium and lead

SOURCE: Revista de chimie, v. 16, no. 5, 1965, 288-289

TOPIC TAGS: cadmium, lead, chemical precipitation, quantitative analysis

ABSTRACT: The author describes a new gravimetric method for the determination of cadmium and lead through precipitation with aqueous solutions of α, α'-dipyridyl hydrochloride or α, α'-dipyridyl nitrate in the presence of ammonium thiocyanate. This method can be used in the presence of the elements Na, K, Ca, Sr, Ba, Mg, Be, Al, Cr, Sc, and NH_4^+ ions. Orig. art. has: 2 figures and 2 tables. [Based on author's Eng. abst.] [JPRS]

SUB CODE: 07 / SUBM DATE: none / ORIG REF: 003 / OTH REF: 008

Card 1/1 UDC: 546.48.04:546.815.04:545.12

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

PIRTEA, Th. I.

A new method for the gravimetric determination of manganese.
Rev chimie Min petr 15 no.10:635-636 O '64.

1. Laboratory of Analytical Chemistry, Faculty of Chemistry
Bucharest University.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

L 64818-65 EWP(t)/EWP(b) IJP(c) JD

ACCESSION NR: AP5023231 RU/0003/64/015/010/0635/0636

AUTHOR: Pirtea, Th. I.

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12
B

TITLE: New method for the gravimetric determination of manganese

SOURCE: Revista de chimie, v. 15, no. 10, 1964, 635-636

TOPIC TAGS: manganese, gravimetric analysis

ABSTRACT:

The author describes a rapid and reliable method for the gravimetric determination of manganese by precipitating the Mn^{++} ions with α,α'-dipyridyl hydrochloride in the presence of ammonium thiocyanate. The method may be used for the determination of manganese in the presence of magnesium, antimony, and the alkali and alkali earth elements if tartaric acid is used as a screening agent. Orig. art. has: 1 table, 1 figure.

Card 1/2

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

L 64818-65
ACCESSION NR: AP5023231

ASSOCIATION: Laboratorul de chimie analitica, Facultatea de chimie, Universitatea Bucuresti (Laboratory of Analytical Chemistry, Faculty of Chemistry, University of Bucharest)

SUBMITTED: 00	ENCL: 00	SUB CODE: IC, GC
NR REF SOV: 000	OTHER: 009	JPRS

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

PIRTEA, Th. I.

Distr: 4E2c

A new microgravimetric method for the determination of aluminum. Th. I. Firtea and Georgeta Mihail (Univ. C. I. Parhon, Bucharest, Romania). *Analele Univ. C. I. Parhon Bucuresti Ser. stiint. nat.* 15, 83-6(1957).—This method uses the Na salt of mercaptobenzothiazole as the pptg. agent. The Al must be in a neutral soln. as the chloride, nitrate, or sulfate salt. Free acids and salts of acetic, tartaric, and oxalic acid must be absent since they will render the soln. acidic and will ppt. the reagent. To a 0.5 ml.-5 ml. soln. of the unknown 0.5-1 ml. of the reagent is added contg. 0.1-0.15 g. of Na mercaptobenzothiazole (I) per ml. of water. The pptn. is immediate and complete at room temp. After some shaking the soln. and ppt. are filtered and washed with a soln. contg. 0.5 g. of I per 100 ml. of water. The ppt. is then dried for 30 min. at 110-15°. It is weighed as the anhydride. This detn. can be performed in the presence of alkali metals and Mg.

Roslin

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

A new method for the micrograviметric determination of cobalt) Separation and determination in the presence of nickel. Th. I. Pirtea and Polly Ilucşan. *Analele şniv. "C.I. Parhon" Bucureşti, Ser. Ştiinţ. nat.* 16, 71–4 (1957).—A new method is given for the micrograviметric detn. of Co as the complex $[Co(NH_3)_6][Co(NO_2)_6]$ (I). By treating a soln. of Co^{++} with $NaNO_2$, AcOH, and an excess of $NaNO_2$, the anionic complex $[Co(NO_2)_6]^{3+}$ or $Na_3[Co(NO_2)_6]$, is obtained. When this soln. is treated at room temp. with an aq. satd. soln. of $[Co(NH_3)_6]Cl_3$, I is pptd. as yellow insol. crystals. The ppt. is filtered after a few min., washed with alc. and abs. ether, dried for 10 min. in a vacuum desiccator, and weighed. The method is precise and rapid because of the insoly. and high mol. wt. of I. Co can also be detd. in the presence of Ni with this method.

C. Heitner-Wirguin

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

PIRTEA J. 1.

Distr: 4E2c(j)/4E2c

A new method for the potentiometric determination of silver in the presence of other elements. P. Spacu and Th. I. Pirtea (Univ. C. I. Parhon, Bucharest, Romania). *Analele univ. C. I. Parhon" Bucureşti, Ser. ştiinţ. mat.* No. 15, 67–71(1957).—This new potentiometric method of titration uses as a reagent a 0.1*N* soln. of Na nitroprusside ($Na_2[Fe(CN)_5NO]\cdot 2H_2O$). In order to cause the coagulation of the ppt. of Ag nitroprusside, 5–6 g. of $NaNO_3$ is added previously to the soln. the total vol. of which should be around 100–150 ml. This allows for a better break in the potential curve at the end point. The potential of the system before the titration is around 408 mv. and the inflection point at 310 mv. with respect to the normal calomel electrode. A Ag wire was used as indicating electrode. The soln. has to be agitated during the whole titration. The presence of Zn and Pb does not disturb the titration since they do not form ppts with the reagent. In the case of Cu and Cd they have to be masked with Complexon III or the Na salt of ethylenediaminetetraacetic acid. In such cases approx. 1 g. of the complexon is added. A. Berlin

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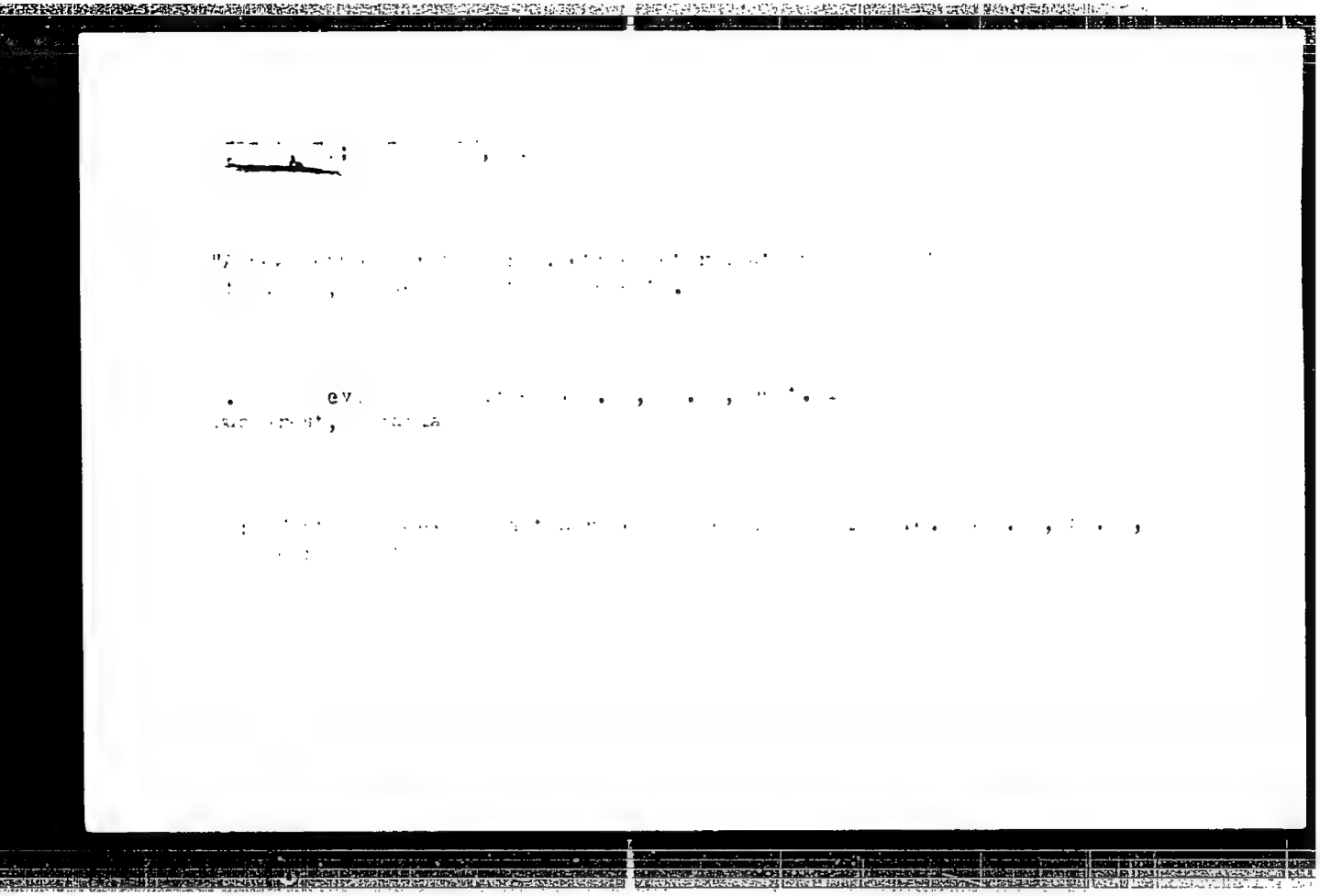

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

PIRTEA TH I

RUMANIA/Analytical Chemistry - Analysis of Inorganic Substances. E-2

Abs Jour : Ref Zhur - Khimiya, No 8, 1958, 24752

Author : Pirtea, Th.I., Stroe, A.
Inst :
Title : New Micro-Gravimetric Method for Determination of Zinc.

Orig Pub : Rev. chim., 1957, 8, No 6, 435-437

Abstract : Description of a method based on precipitation of Zn^{2+} with the Na-salt of mercapto-benzothiazole at room temperature. The precipitate is filtered off immediately, dried at 110° and weighed. The conversion factor is 0.1044.

Card 1/1

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RUMANIA/Analytical Chemistry - Analysis of Inorganic Substances. E-2

Abs Jour : Ref Zhur - Khimiya, No 8, 1958, 24742

Author : Spacu, P., Pirtea, Th.I.
Inst : -
Title : New Method of Potentiometric Determination of Silver in the Presence of Other Elements.

Orig Pub : An. Univ. "C.I. Parhon". Ser. stiint. natur., 1957, N 25, 67-71

Abstract : Ag^+ is determined by potentiometric titration with 0.1 N solution of Na nitroprusside in a weakly acidic solution and in the presence of 5-6 g $NaNO_3$ which serves to coagulate the resulting colloidal $Ag_2Fe(CN)_5(NO)$. An Ag wire is used as the indicator electrode and a calomel electride as the reference electrode. The presence in the solution being titrated of Pb^{2+} (up to 50 ml of 0.1 N solution) and of Zn^{2+} (up to 30 ml of 0.1 N solution) does not interfere with determination of Ag. In the presence of Cu^{2+}

Card 1/2

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RUMANIA/Analytical Chemistry - Analysis of Inorganic Substances. E-2

Abs Jour : Ref Zhur - Khimiya, No 8, 1958, 24742

(30 ml 0.1 N solution) and Cd^{2+} (5 ml 0.1 N solution) 0.8-1 g Complexon III are added to the solution being titrated in order to mask these ions. NO_3^-, CH_3COO^-, SO_4^{2-} do not interfere. Determination error does not exceed 2%.

Card 2/2

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RUMANIA/Analytical Chemistry - Analysis of Inorganic Substances. E-2

Abs Jour : Ref Zhur - Khimiya, No 8, 1958, 24761

Author : Pirtea, Th.I., Mihail Georgeta
Inst :
Title : New Micromethod of Gravimetric Determination of Aluminum

Orig Pub : An. Univ. "C.J. Parhon". Ser. stiint. natur., 1957, N. 15, 83-86

Abstract : On interaction of Al^{3+} with the Na-salt of mercapto-benzothiazole (I) in neutral or weakly acidic media (pH 6) there is formed a white crystalline precipitate of $Al(C_7H_4NS_2)_3$, which is practically insoluble in water and in excess of the reagent, and which is suitable for a gravimetric determination of Al. To 0.5-5 ml of the solution being analyzed, containing about 0.5 mg/ml of Al, are added 0.5-1 ml of 10-15% solution of I. The mixture is stirred, filtered and washed 2-3 times with 0.5% solution of I, and 2-3 times with water. The precipitate so obtained

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

Abs Jour : Ref Zhur - Khimiya, No 8, 1958, 24761

is dried at 110-115° and weighed. The conversion factor is 0.051307. Ions of alkali metals and Mg do not interfere with the determination. In the presence of free mineral acids, acetates, oxalates and tartrates, the I itself is precipitated, hence they must be removed beforehand. The described method is not inferior in accuracy to the 8-hydroxy-quinoline method.

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Piatea, Th I.

4

Distr: 4E2c

27

Microgravimetric determination of thorium. Th. I. Pietea and Georgeta Mihail (Univ. C. I. Parhon, Bucharest, Romania). *Analele Univ. "C. I. Parhon" Bucuresti Ser. stiinț. nat.* No. 12, 81-6(1958).--Th is pptd. as $Th(C_7H_4NS_2)_4$ with a soln. of the Na salt of mercaptobenzothiazole. The pptn. is immediate at room temp., and the ppt. is white and cryst. It is filtered immediately and dried 30-60 min. at 110-15°. This method can be used to det. Th in the presence of the salts formed by the alkali and by Mg with strong acids. Free acids must be absent from the Th soln., as they will ppt. the pptg. agent. . . . A. Berlin

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

Distr: 1E2c

A new microgravimetric method for the det[illegible] of aluminum. Th. I. Pirtea and [illegible] C. I. Parhon, Bucharest, Romania. [illegible] *Parhon Bucuresti Ser. stiint. nat.* 15 [illegible] method uses the Na salt of mercaptobenzothiazole as the pptg. agent. The Al must be in a neutral soln. as the chloride, nitrate or sulfate salt. Free acids and salts of tartaric and oxalic acid must be removed since they will render the soln. acidic and will prevent complete ppt. To 5 ml 5 ml soln. of the unknown [illegible] added 5 ml 0.1 0.15 g [illegible] per ml of water. The ppt. is [illegible] room temp. After one hr shaking [illegible] tered and washed with a soln. [illegible] of water. The ppt. is then dried [illegible] It is weighed as the aluminum. [illegible] formed in the presence of alkali metals or [illegible]

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

PIRTEA, TH.; SPAC", P.

A method of determining penicillin in finished products. p. 49.

ANALELE STIINTELOR NATURII. Bucuresti, Rumania. Vol. 7, no. 20, 1958.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, no. 9, Sept., 1959

Uncl.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

RUMANIA / Analytic Chemistry. Analysis of Inorganic Substances.

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 60622.

Author : Th. I. Pirtea, Polly Bucsan.
Inst : "C. J. Parhon" University.
Title : New Method of Microgravimetric Determination of Cobalt. Separation and Determination of Cobalt in Presence of Nickel.

Orig Pub: An. Univ. "C. J. Parhon". Ser. stiint. natur., 1957, No 16, 71-74.

Abstract: The earlier developed method of determination of Co in the form of the complex $[Co(NH_3)_6]$ $[Co(NO_2)_6]$ (RZhKhim, 1958, 24807) was applied to the de-

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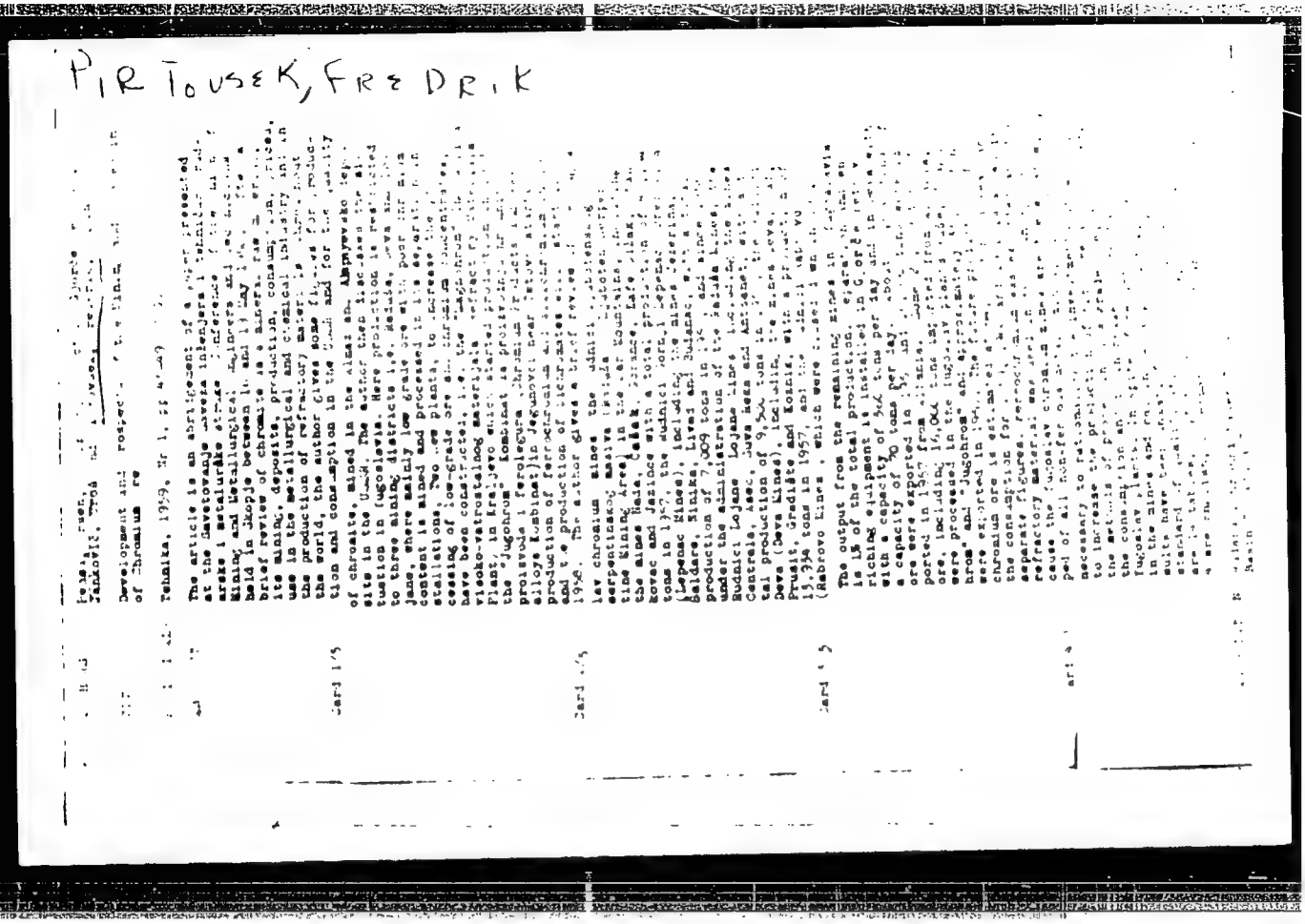

PIR TOUSEK, FREDRIK

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8"

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L 16062-65 EWT(m)/EPF(c)/EPR/EWP(j)/T Pc-4/Pr-4/Ps-4 RPL RM/RM
ACCESSION NR: AP4046174 S/0079/64/034/009/2910/2911

AUTHOR: Kacheyshvili, G. Ye.; Pirtskhalava, N. I.; Dzhioshvili, G. D.

TITLE: Reaction of borontrialkyls with phenylmagnesium bromide

SOURCE: Zhurnal obshchey khimii, v. 34, no. 9, 1964, 2910-2911

TOPIC TAGS: borontrialkyl, phenylmagnesium bromide, alkyl aryl organic boron compound, triphenylboron

ABSTRACT: The reaction proceeds according to the scheme

$$n\,C_6H_5MgBr + R_3B \longrightarrow (C_6H_5)_nR_{3-n}B$$

and was conducted in ether solution under nitrogen, yielding a mixture of alkyl-aryl organic boron compounds or triphenylboron. The desired products were obtained with a 40-75% yield and are described. These were phenyldiisopropyl-, diphenylisopropyl-, phenyldi-n-propyl-, phenyldiisobutyl-, diphenylisobutyl-, phenyl-di-n-butyl-, diphenyl-n-butyl, phenylisoamyl-, phenyldi-n-amyl- and triphenylboron. Orig. art. has: 2 tables and 1 formula

Card 1/2

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

L 16062-65
ACCESSION NR: AP4046174

ASSOCIATION: Tbilisskiy gosudarstveny*y universitet (Tbilis State University)

SUBMITTED: 01Jul63 ENCL: 00

SUB CODE: GC, OC, MT NO REF SOV: 001 OTHER: 000

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APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8"

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

PIRTSKHALAVA, M.D.

Concerning synthetic machine translating networks for conjunctions and particles in the Georgian language. Trudy Inst.elek., avtom.i telem.AN Gruz.SSR 2:113-115 '61. (MIRA 14:8)
(Georgian language--Machine translating)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

L 65177-65 EWT(l)/EPA(s)-2/EWT(m)/EPF(c)/EWP(j)/T/EWA(h)/EWA(c) IJP(c)/
RPL JW/AT/RM

ACCESSION NR: AP5022150 UR/0364/65/001/009/1145/1149
621.315.592:547

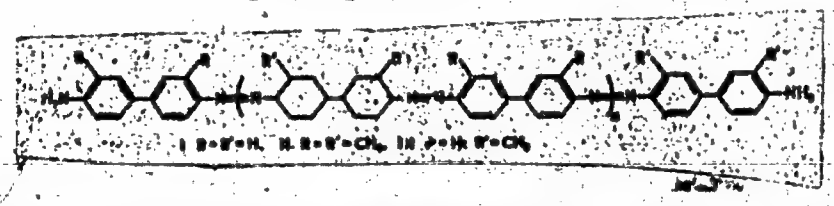
AUTHOR: Demidova, G. N.; Pirtskhalava, R. N.; Rozenshteyn, L. D.; Terpugova, M. P.; Kotlyarevskiy, I. L.

TITLE: Absorption spectra, electrical conductivity, and photoconductivity of polyazopolyarenes

SOURCE: Elektrokhimiya, v. 1, no. 9, 1965, 1145-1149

TOPIC TAGS: organic semiconductor, organic photoconductor, photoconductivity, electric conductivity, conjugated polymer

ABSTRACT: Electrical conductivity, photoconductivity and absorption spectra have been measured for a number of polyazopolyarenes:



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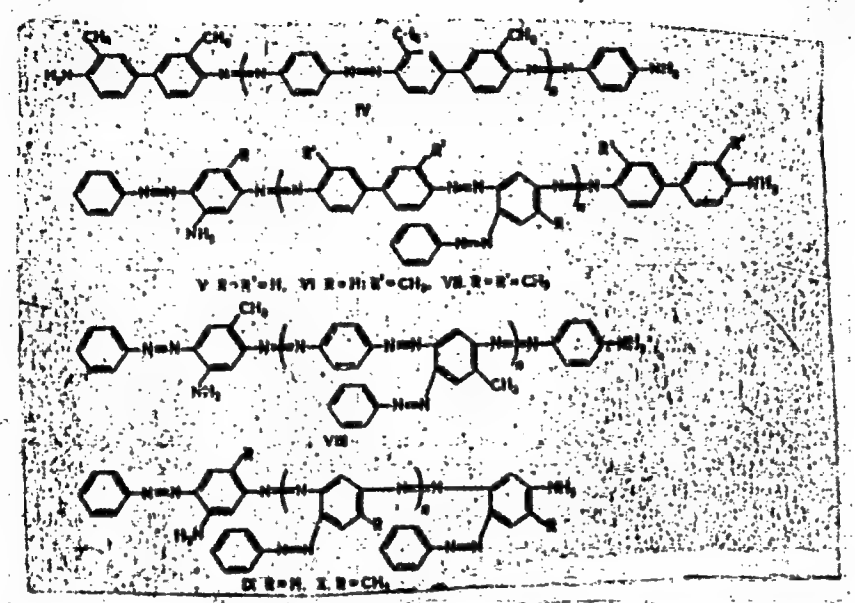
"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

L 65177-65

ACCESSION NR: AP5022150



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ACCESSION NR: AP5022150

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The materials were prepared by oxidative polycondensation or copolycondensation of aromatic diamines in the presence of cuprous chloride catalyst. The study of these compounds was prompted by the varying character of conjugation among them. The properties of the compounds are shown in Table 1 of the Enclosure. Electrical measurements were carried out with molded specimens. The temperature dependence of electrical conductivity obeyed an exponential law. For some of the compounds the log σ versus 1/T curves showed a break and hence two values of E and σ_0 are given for them in Table 1. Photoconduction was studied with film specimens. In the field range used (up to 5×10^4 v/cm) the photocurrent obeyed Ohm's law. For most films the lux-ampere characteristic was linear. The photocurrent was an exponential function of temperature. The spectral regions of photoconductivity corresponded to spectral regions of optical absorption. Comparison of absolute values of photocurrent for the polymers revealed a sharp drop in photocurrent on going to compounds with decreasing conjugated chain length. Orig. art. has: 6 figures, 1 table, and 5 formulas. [SM]

44,55

ASSOCIATION: Institut poluprovodnikov Akademii nauk SSSR (Institute of Semiconductors, Academy of Sciences SSSR); Institut khimicheskoy kinetiki i goreniya Sibirskogo otdeleniya Akademii nauk SSSR (Institute of Chemical Kinetics and Combustion, Siberian Department, Academy of Sciences SSSR) 44,55

Card 3/6

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

L 65177-65

ACCESSION NR: AP5022150

SUBMITTED: 09Feb65 ENCL: 02 SUB CODE: MT, GC

NO REF SOV: 006 OTHER: 000 ATD PRESS: 4089

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APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

L 65177-65
ACCESSION NR: AP5022150 ENCLOSURE: 01

Table 1. Properties of polyazopolyarenes

Diamines	Polymer	mp	Solubility	Electrical conductivity data			
				E_1, ev	σ_{01}, $ohm^{-1}\,cm^{-1}$	E_2, ev	σ_{02}, $ohm^{-1}\,cm^{-1}$
Benzidine	I	Does not melt until 500C	Partial in dimethylformamide	0.63 <230°	$1.13\cdot10^{-5}$	0.78	2.9
O-Toluidine	II	"	Partial in acetone, benzene, chloroform, dioxane			1.4	$3.63\cdot10^{2}$
o-Toluidine benzidine	III	288C	Partial in chloroform, dioxane	0.59 <130°	$7.2\cdot10^{-7}$	1.8	$1.82\cdot10^{11}$
o-Toluidine p-phenylene-diamine	IV	249C	Partial in acetone, chloroform, benzene			2.1	$1.15\cdot10^{13}$
Benzidine, chrysoidene	V	352C	Partial in chloroform, acetone			2.35	$1.15\cdot10^{12}$

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L 65177-65

ACCESSION NR: AP5022150 ENCLOSURE: 02

Table 1. Properties of polyazopolyarenes (Cont.)

Diamines	Polymer	mp	Solubility	Electrical conductivity data			
				E_1, ev	$\sigma_{\parallel}$, ohm^{-1} cm^{-1}	E_2, ev	$\sigma_{\parallel}$, ohm^{-1} cm^{-1}
o-Toluidine, chrypoidene	VI	286C	Partial in chloroform, acetone	0.84 t=156	$1.1 \cdot 10^{-4}$	2.1	$1.8 \cdot 10^{11}$
o-Toluidine, methylchrysoidene	VII	212—217	Partial in benzene, acetone, chloroform, dimethylformamide			2.95	$3 \cdot 10^{11}$
p-Phenylenediamine	VIII	209—215	Partial in benzene, acetone, chloroform, dimethylformamide			3.1	$2 \cdot 10^{12}$
Chrysoidene	IX	276—278	In benzene, cumene, acetone, chloroform			3.5	$1.1 \cdot 10^{13}$
Methylchrysoidene	X	152	In benzene, cumene, acetone, chloroform			3.14	$6.2 \cdot 10^{13}$

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

L 62793-65 EWT(m)/EPF(c)/EPR/EWP(j)/T/EWA(d) Pc-4/Pr-4/Pu-4 WW/JAJ/EM

ACCESSION NR: AP5018457 UR/0364/65/001/007/0876/0880

621.315.592:547

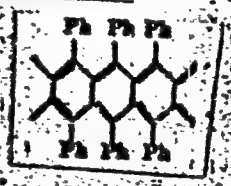
AUTHOR: Davydov, B. E.; Denisova, G. N.; Kazirov, F. M.; Pirtskhalava, R. M.; Rozenshteyn, L. D. 33 32 B

TITLE: Synthesis of polydiphenyldiacetylenes and their electrical and physical properties

SOURCE: Elektrokhimiya, v. 1, no. 7, 1965, 876-880

TOPIC TAGS: polymerization synthesis, acetylene, thermal stability, catalysis, photoelectric current

ABSTRACT: The article is concerned with the investigation of the properties of thermally polymerized diphenyldiacetylene, having the following structure



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L 62793-65
ACCESSION NR: AP5018457

The fact that all hydrogen atoms of the main chain are replaced by phenyl groups accounts for its solubility in chloroform, benzene, ether, dioxane, dimethylformamide and for its high thermal stability. It may be heated as high as 500° C without any significant decomposition. The polymer is a nonfusable dark brown substance. When it is deposited from solution on a substrate it forms a relatively strong film. The kinetic polymerization curves at different temperatures are shown in Fig. 1 of the Enclosure. The cryoscopic data indicates that the molecular weight of the polymer is 1100. Experiments with polymer films show that upon interaction with oxygen under the influence of light this polymer does not have a tendency to form inner peroxides. Diphenyldiacetylene was also polymerized catalytically using a complex catalyst, produced during interaction of triethylaluminum and vanadyl acetylacetonate. The polymer obtained was also soluble in benzene, chloroform and other organic solvents. The thermal stability of this polymer was somewhat lower than in the polymers produced by thermal initiation. The lower stability is explained by the presence of the following structures in the chain

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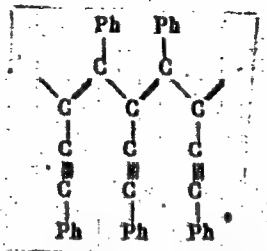
L 62793-65
ACCESSION NR: AP5018457



The photoelectric conductivity of thermal polymers is observed in the region where they absorb light. The spectral dependence of the photoelectric current reduced to the same amount of energy incident on the specimen is in good agreement with the absorption spectrum (Fig. 2 of the Enclosure). Catalytic polymers displayed no photoelectric conductivity. An attempt was made to measure the dark current, but it was possible to record it only when the field strength exceeded $2 \cdot 10^4$ V/cm. Orig. art. has: 5 figures.

ASSOCIATION: Institut neftekhimicheskogo sinteza Akademii nauk SSSR (Petrochemical Synthesis Institute Academy of Sciences SSSR)

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L 62793-65
ACCESSION NR: AP5018457

Institut poluprovodnikov Akademii nauk SSSR (Institute of Semiconductors Academy of Sciences SSSR)

SUBMITTED: 09Feb65 ENCL: 02 SUB CODE: OC, EM

NO REF SOV: 005 OTHER: 000

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

L 62793-65

ACCESSION NR: AP5018457

ENCLOSURE: 01

Fig. 1. Kinetic curves for thermal polymerization of diphenyldiacetylene at 106° C (1) and 133° C (2)

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L 62793-65

ACCESSION NR: AP5018457

ENCLOSURE: 02

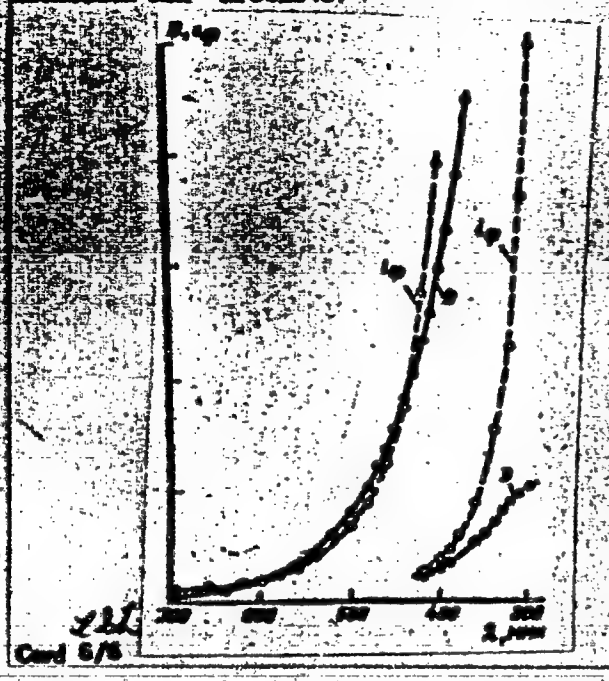

Fig. 2. Spectral absorption curves and photoelectric current per unit incident energy, of polydiphenylacetylene, heated at 150° C for 3 hrs 45 min. The curves on the right are given on smaller scale.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

KUTATELADZE, K.S.; PIRTSKHALAVA, Ye.A.

Investigating Borzhomi andesites in connection with the manufacture of dark glazes. Soob. AN Gruz.SSR 21 no.6:673-676 D '58.
(MIRA 12:4)

1. AN GruzSSR, Institut metallurgii. Predstavleno chlenom-korrespondentom Akademii F.N. Tavadze.
(Borzhomi--Andesites) (Glazes)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

M-8

USSR/Cultivated Plants. Subtropical. Tropical.

Abs Jour: Ref. Zhur-Biologiya, No 5, 1958, 20532.

Author : S. Kh. Pirtskhalayshvili
Inst : The All-Union Scientific Research Institute for Tea and Subtropical Crops.
Title : Contribution to the Problem of Better Stocks for Citrus Crops. (K voprosu o luchshikh podboyakh dlya tsitrusovykh kul'tur).

Orig Pub: Byul. Vses. n.-i. in-ta chaya i subtrop. kul'tur, 1956, No 4, 72-80.

Abstract: Preliminary data is given on the tests conducted from 1950 to 1956 to study stocks for citrus fruit cultures under field conditions. As stocks one tried the trifoliata, bitter orange, Kaba lemon, seedlings of the Novogruzinskiy lemon, seedlings of the Mestniy orange, Natsu-Mikan, Tsitrus

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

USSR/Cultivated Plants. Subtropical. Tropical.

Abs Jour: Ref Zhur-Biologiya, No 5, 1958, 20532. M-8

Yunos, The Grapefruit Duncan, Tsitranzh, Kinkan; as grafts, the Novogruzinskiy lemon, seedlings of the Novogruzinskiy lemon, seedlings of the Monakello lemon, the Washington Navel orange, seedlings of the Mestniy orange, the Unshiu mandarin. Eyes of the Novogruzinskiy lemon adapted themselves almost uniformly well to all stocks (95-97%); eyes of the Monakello lemon showed maximum adaptability when inoculated into the Kaba lemon (96%) and minimal in the bitter orange and trifoliata (53-55%); eyes of the Washington Navel orange had maximum adaptability on seedlings of the Novogruzinskiy lemon (91%). Eyes of the Unshiu mandarin showed maximum compatability when they were inoculated in seedlings of the Novogruzinskiy lemon and Kaba lemon (77-78%), then on the trifoliata (65%) and least on the bitter orange (45%). The most vigorous growth in all

Card : 2/4

USSR/Cultivated Plants. Subtropical. Tropical.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

Abs Jour: Ref Zhur-Biologiya, No 5, 1958, 20532. M-8

stocks observed was witnessed in the Novogruzinskiy lemon, then come the Washington Navel orange and Monakello lemon. The Unshiu mandarin orange displayed vigorous growth on all stocks. Among the powerfully growing stocks are cited the seedlings of the Novogruzinskiy lemon, then the Kaba lemon, the bitter orange, the grapefruit, orange seedlings; the weakest growth is in the trifoliata. Of all the stocks tested the trifoliata was the most suitable stock for open ground citrus cultures, inasmuch as it promoted increased frost resistance and earlier fruit bearing of the citrus crops and guaranteed a steady growth in the grafts. Low growing trees are easier to protect in cold weather and it is more convenient to take care of them. On this stock all citrus varieties show satisfactory eye adaptability.

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S/137/60/000/011/034/043
A006/A001

Translation from: Referativnyy zhurnal, Metallurgiya, 1960, No. 11, p. 251, # 27245

AUTHORS: Tavadze, F.N., Pirtskhalayshvili, V.A.

TITLE: Investigating the Structure of Cast-Iron of the Chrome-Manganese System

PERIODICAL: Dokl. Nauchno-proizv. konferentsii mashinostroiteley i priborostroiteley, Leningrad, Sudpromgiz, 1959, pp. 184 - 194

TEXT: It was revealed that in alloys of the Fe-Cr-Mn system at a C content of 0.12%, C widens considerably the range of alloys with an austenite base, shifting it toward the side of higher Cr concentrations. At C 2.2 - 2.4% this range includes alloys containing > 25% Cr. The austenite of Cr-Mn-cast irons with Mn 15 - 20%, Cr from 0 to 6 - 8%, decomposes partially into perlite starting from 675 - 700°C; austenite, however, does not undergo perlite decomposition. In low-chromium alloys, in the range of austenite-base Cr-Mn-system of cast-irons, a part of Mn is bound in $(Fe,Mn,Cr)_3C$ carbides. In high chromium alloys, Cr is

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S/137/60/000/011/034/043
A006/A001

Investigating the Structure of Cast-Iron of the Chrome-Manganese System

mainly bound in carbides and its ferrite-forming capacity vanishes. Si affects the stability of the austenite of the Cr-Mn system. In the Cr-Mn system of cast irons C is bound in carbides rich in Cr and Mn. Free C is present in the structure only in alloys with a low Cr and Mn content. There are 18 references.

A.S.

Translator's note: This is the full translation of the original Russian abstract.

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APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

ZHDGINIDZE, Ye.N.; PIRTSKHALAVA, Ye.A.; MAMULASHVILI, N.K.; BAGATUROVA, I.A.

Studying laterite clays of the Tsetskhlauri deposit. Soob.AN Gruz. SSR 25 no.5:539-542 N '60. (MIRA 14:1)

1. Akademiya nauk GruzSSR, Institut prikladnoy khimii i elektrokhimii, Tbilisi. Predstavleno akademikom R.I.Agladze.
(Kobuleti District--Laterite)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

CHARGEYSHVILI, A.K., prof.; PIRTSKHALAYSHVILI, V.A.

Report on the activity of the Georgian Scientific Medical Society of Otorhinolaryngologists for 1962. Vest. oto-rin. 25 no.4:104-106 Jl-Ag '63. (MIRA 17:1)

1. Predsedatel' Gruzinskogo nauchnogo meditsinskogo obshchestva otorinolaringologov (for Chargeyshvili). 2. Sekretar' Gruzinskogo nauchnogo meditsinskogo obshchestva otorinolaringololev (for Pirtskhalayshvili).

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

TAVADZE, F.N.; PIRTSKHALAYSHVILI, V.A.

Effect of high carbon content in the austenite field of the system iron-chromium-manganese. Soob. AN Gruz.SSR 21 no.6:727-733 D '58. (MIRA 12:4)

1. AN GruzSSR, Institut metallurgii, Tbilisi. 2. Chlen-korrespondent AN GruzSSR (for Tavadze).

(Iron alloys)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

CHARGEYSHVILI, A.K., prof., PIRTSKHALAYSHVILI, V.A.

Report on the work of the Georgian Society of Otorinolaryngologists in 1956. Vest.oto-rin. 19 no.4:120-122 Jl-Ag '57. (MIRA 10:11)

1. Predsedatel' Gruzinskogo respublikanskogo nauchnogo obshchestva oto-rino-laringologov (for Chargeyshvili). 2. Sekretar' Gruzinskogo respublikanskogo nauchnogo obshchestva oto-rino-laringologov (for Pirtskhalayshvili)

(OTORHINOLARYNGOLOGISTS)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

PIRUMOV, Kh.N.

Data on the development of control of parasitic diseases in the Armenia S.S.R. Med.paras. i paras.bol. 26 no.5:578-581 S-O '57. (MIRA 11:2)

1. Iz Instituta epidemiologii i gigiyeny Ministerstva zdravookhraneniya Armyanskoy SSR.
(PARASITIC DISEASES, prev. & control in Armenia (Rus))

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

PIRTEA, DESPINA

A new gravimetric method for the rapid determination of copper. Despina Pirtea, Ecaterina Ruxatu, and Suzana Zelig. *Acad. rep. Populare Romîne, Studii cercetări chim.* 3, 233-6(1955)(French summary).- The method is based on the pptn. of Cu^{++} as $[Cupy_4](ClO_4)_2$ with $NaClO_4$ (I) in the presence of pyridine (II). Add II dropwise to 20-30 ml. of the soln. until the blue color does not change and a slight odor of II is perceptible; add an excess of I (2-5 g.), stir, and let the ppt. stand until the supernatant is clear and colorless. (If the soln. is still bluish, add more I and agitate again). Filter the soln. through a filter crucible A; wash several times with an aq. soln. satd. with I contg. 2 drops of II/50 ml.; next wash 5-8 times with 2-ml. portions of a soln. contg. abs. EtOH (3 ml.), abs. Et_2O (7 ml.), II (2 drops), and I (0.01 g.), and finally wash 4-5 times with 2-3-ml. portions of abs. Et_2O. Dry for 15 min. in a vacuum desiccator (to const. wt.) and filter. The accuracy of the method is within ±0.4%.

Gary Gerard

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

PIRTEA, DESPINA

New gravimetric methods for the rapid determination of nickel, cobalt, and cadmium. Despina Pirtea, Gh. Dumitrescu, and N. Melencu. *Acad. rep. populare Romîne, Studii cercetări chim.* 3, 237–42(1955)(French summary).—The methods are based on the pptn. and direct weighing of the insol. complexes [X pyr][Cr_2O_7], where X = Ni, Co, and Cd. To 30–50 ml. soln. contg. Ni, add pyridin. (I) dropwise until the blue color is not intensified by further addn. Add an excess of an aq. soln. satd. with $K_2Cr_2O_7$ (II), heat cautiously to boiling while agitating continuously, and then boil for a few more min. until the ppt. has become cryst. (evidenced by rapid settling). Add 2 more drops of I and 1 ml. of II; cool to room temp.; filter through a filter crucible; wash several times with a soln. contg. II (3 ml.), I (0.5 ml.), and H_2O (100 ml.); and then wash 5–6 times with 2-ml. portions of abs. EtOH contg. 50 drops of I in 10 ml. Apply a relatively high vacuum, and wash 3–4 times with 2-ml. portions of abs. Et_2O. Dry in a vacuum desiccator at room temp. and weigh. Co and Cd are detd. similarly. All 3 methods are accurate to within ±0.2%.
Gary Gerard

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

PIRTEA, DESPINA

USSR

✓ 666. Separation and gravimetric determination of copper in the presence of iron or aluminium or [redacted] G. Hoară and Despina Pîrtea (Comun. Acad. R.P. Romîne, 1953, [redacted]). *Referativnyĭ Zh., Khim.*, 1954, Abstr. No. 31,699).— Copper is ppt'd. as $CuPy_2(CNS)_2$ (Spacu and Dick, *Z. anal. Chem.*, 1937, 71, 184) from a soln. containing tartrate, which prevents the ppts. of Fe and Al. Fe and Al are ppt'd. from the filtrate by an ethanolic soln. of 8-hydroxyquinoline. E. Hayes

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

[illegible], E.; [illegible], E.; [illegible], T.

New gravimetric method for rapid determination of copper. p. 233.

Academia Republicii Populare Romine. STUDII [illegible]

Bucuresti. Vol. 3, no. 3/4, July/Dec. 1955

So. East European Accessions List Vol. 5, No. 9 September, 1956

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

PIRTEA, I.; TEODOR, A.

A new microgravimetric method for the determination of zinc.

P. 435 (REVISTA DE CHIMIE) (Bucuresti, Rumania) Vol. 8, No. 6, June 1957

SO: Monthly Index of East European Accessions (EEAI) LC Vol. 7, No. 5, 1958

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

NISTIA, T.

Theorghe Spacu; an obituary. p. 155. Academia Republicii Populare Romine. STUDII SI CERCETARI DE CHIMIE. Bucuresti. Vol. 3, no. 3/4, July-Dec. 1955.

So. East European Accessions List Vol. 5, No. 9 September, 1 56

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

PIRTEA, T.

A new method for the separation and gravimetric dosage of zinc. p. 183. Vol. 2, No. 3/4, July/Dec. 1954, Bucuresti, Rumania.

SOURCE: East European Accessions List, Library of Congress, Vol. 5, No. 10, October 1956.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

PIPTEA,T.

"A New Method for the gravimetric [illegible] of beryllium. P/C? BULETIN STIINTIFIC, Vol. 3, No.2-4, Apr./Dec. Bucuresti, Rumania.

SO: Monthly List of East European Accessions, L.C.Vol. 2, No. 11, Nov, 1953. Uncl.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

HIRTEA, T.

Rapid precise process for separation and gravimetric quantitative analysis of zinc in the presence of iron and aluminum. p. 459.
ACADEMIA REPUBLICII POPULARE ROMANE. RUmania. Vol. 5, no. 5, May 1955.

SOURCE: EEAL LC Vol. 5, No. 11, August 1956

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

[illegible]

[illegible]/Analysis of [illegible] G-2

Abs Jour: [illegible], [illegible], 1957, [illegible]

Author : S. Speca, H. Firton
Inst : [illegible]
Title : New [illegible] Determination of Mercury in the Presence of Iron and Aluminum.

Orig Pub: [illegible]

Abstract: [illegible] are precipitated as HgO, [illegible] after Fe^{3+} and Al^{3+} have been combined in [illegible] salicylate complexes. Both Al are determined in the filtrate, after a known portion.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

PIRTEA, Th. I.

New gravimetric methods for the determination of thorium, aluminum, beryllium, and zinc and their separation from certain elements. G. Spacu and Th. I. Pirtea (Univ. "C. I. Parhon," Bucharest). *Rev. chim., Acad. Rep. populaire Roumaine* 1, No. 2, 6-25(1950)(In French).—In a modification of a method with mercaptobenzothiazole (I) for the detn. of Cu, Cd, Pb, Tl, Bi, and Au (*C.A.* 29, 7213⁸; 30, 2375⁶), a procedure is described by which Th, Al, Zn, and Be are estd. gravimetrically by means of the Na salt (II) of I. *Th.* To 5-20 ml. of a $Th(NO_3)_4$ soln. contg. 0.01-0.1 g. Th, add 2-10 ml. of a 10% aq. soln. of II with agitation. The pptd. I-Th (III), white crystals, is filtered, washed with 50-100 ml. of a soln. contg. 0.1-0.15 g. of II and distd. H_2O, and dried at 110-20°. The factor is 0.2676. III can be calcined to ThO_2 at 1100°. *Al.* It is detd. by a similar method as a salt of I (factor 0.051307), or by the calcination of the latter to Al_2O_3. In the presence of Mg, Al is pptd. 1st with II, and after the pptn. of I with 10-15% HCl, Mg is detd. in the filtrate with an alc. soln. of 8-quinolinol (IV) (Berg, *C.A.* 21, 3850). *Be.* A neutral or weakly acidic Be salt soln. (5-50 ml.) contg. 0.003-0.06 g. Be is pptd. with 1-15 ml. of the soln. of II. The resulting I-BeOH·½H_2O is washed with warm 3% NH_4NO_3 soln. contg. II, dried over P_2O_5, and calcined to the oxide. SO_4^{--}, NO_3^-, halogen$^-$, OAc^-, Na^+, K^+, NH_4^+ do not interfere with this detn. The sepn. of Be from Mg is carried out similarly to the estn. of Al and Mg. *Be in the presence of Al.* Al is pptd. with IV (Kolthoff and Sandell, *C.A.* 32, 3112), and Be from the filtrate with II at 60°. The Be-I is estd. as oxide. *Zn.* The Zn salt soln. (5-50 ml.) (pH 5-6), contg. 1-2 g. NaCl is pptd. with a 10% soln. of II (factor 0.1044). In the presence of Al and Fe, 1-2 g. of tartaric acid is added and Zn pptd. as Zn-I and calcined to ZnO. *Zr.* It is pptd. at pH 2.9 and estd. as ZrO_2.

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PIRTEA, T. I.

3

1000. A new [illegible] method for [illegible] determination of beryllium. T. I. Pirtea. *Rev. Chim., Bucharest*, 1958, 7 [1], 427–430.—The amphoteric character of Be, which forms easily soluble beryllates and salts that readily hydrolyse, hinders the formation of a single stable complex. This difficulty is overcome by combining Be with a suitable complex ion, and then with a second one. This is achieved by treating soln. of Be^{++} with conc. soln. of ammonium carbonate. The sol. beryllium complex thus formed is treated with a conc. soln. of hexa-amminocobalt chloride, which gives a very insoluble cryst. yellow ppt. of $[(H_2O)_2Be_2(CO_3)_2(OH)_2][Co(NH_3)_6].3H_2O$, which is easily washed and dried in a vacuum desiccator. The method is simple and quick (40 to 50 min.), and can be used in the presence of alkaline metals and Fe. Since the Be content of the ppt. is only 4·1%, accurate determination of small quantities is possible.

H. Sher

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

PIRTEA, T. I.

2894. New gravimetric and volumetric method for determination of silver. T. I. Soaru and T. I. Pirtea. *Rev. Chim., Bucharest*, 1956, 7 (8), 491–6. [Rom.]—The procedure is based on the reaction of Ag^+ with sodium nitroprusside (I), which gives a cream ppt. of $Ag_2[Fe(CN)_5(NO)]$, unaffected by light, stable, and insoluble, with mol. wt. greater than that of the usual halogen complexes. Pptn. is rapid and complete at room temp., and ppt. can be filtered immediately, and after washing can be dried in a vacuum desiccator or even in an oven at 110°. If modified the method can be used in the presence of Pb and Zn. *Gravimetric method*—To 10 to 30 ml of a neutral or acid soln. of Ag^+ at 50° to 80° add 1 to 2 g of solid NH_4NO_3 followed by approx. 0·1 *N* I. A yellow - red colour of the supernatant liquid indicates complete pptn. and excess of I. Filter immediately through a sintered glass crucible, washing with NH_4NO_3 soln. (3%), water, ethanol and ether. Dry in a vacuum desiccator and weigh. The determination takes 1 to 1·5 hr. In the presence of Pb or Zn the ppt. is washed 4 to 5 times with aq. NH_4NO_3 soln. (3%) heated to between 50° and 60°. *Volumetric method*—Since addition of I soln. to $AgNO_3$ soln. leads to the formation of a colloidal ppt., the determination is carried out by running $AgNO_3$ soln. into a known vol. of I. This gives a good end-point with or without eosin as an adsorption indicator. Results are consistently ≃ 0·2% high.

H. SERR

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

PIRTEA, Th.I.

New methods for the gravimetric determination of copper. Rev chimie Min petr 13 no.4:234-235 Ap '62.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

Pirtea, Th. I.

1000

A new method for the separation and gravimetric determination of zinc. G. Spacu and Th. I. Pirtea (C. I. Parhon Univ., Bucharest). *Acad. Rep. Populare Romîne, Studii Cercetări Chim.* 2, No. 1-2, 43(1954)(French summary).—Zn can be ppd. as $Zn(C_7H_4NS)_2$ (I) by adding an excess of a 10% soln. of the Na salt of mercaptobenzothiazole to the slightly acidic soln. (pH 5-6), filtering, washing, and drying at 115–120°. Adding a little NaCl improves the filtration. Na, K, Co, Ba, Mg, and Sr do not interfere. Calcining I at 800–900° gives ZnO.

Gary Gerard

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RUMANIA / Analytical Chemistry. Inorganic Analysis.

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81928

Author : Spacu, P.; Pirtea, Th. I.
Inst : Not given
Title : Potentiometric Determination of Silver in the Presence of Other Elements

Orig Pub : An. Univ. "C. I. Parhon". Ser. stiint. natur., 1958, No 20, 55-58

Abstract : It has been determined that the method previously developed by the authors for the determination of Ag^+ by the potentiometric titration with sodium nitroprusside solution (RZ Khim, No 9, 1958, No. 24742) is also applicable when Tl^+ and most elements that are found with Ag in alloys and ores (Pb, Cd, Zn, Cu, Co, Ni, Mn, Sb) are present in the solution. The solution

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Gravimetric method for the determination of beryllium in the presence of other elements in alloys and minerals. Th. I. Pitten and V. Constantinescu (Univ. "C. I. Parhon," Bucharest, Rumania). *Z. anal. Chem.* 165, 183–8(1959). —In the presence of (ethylenedinitrilo)tetraacetic acid (I) Cu, Cd, Zn, Co, Ni, Fe, Al, Ti, Mn, Mg, Ca, Na, K, and NH_4^+ do not interfere in the pptn. of $[Co(NH_3)_6][(H_2O)_2Be_2(CO_3)_2(OH)_2].3H_2O$. For the detn. of up to 75 mg. Be in 5–25 ml. of weakly acid soln. add 0.5–1 g. NH_4Cl and 0.5–2 g. I (more if large amts. of Fe^{+++} are present). If a ppt. forms, add 10% NH_4OH dropwise until the ppt. dissolves. Add 2–3 g. powd. $(NH_4)_2CO_3$. Add without mixing 0.5–3 ml. of $Co(NH_3)_6Cl_3$ soln. (II) and wait for the ppt. to start forming. Add an excess of II. Dil. the soln. so that the salt concn. is 2–3%, let stand for 1.5–2 hrs., and filter into a sintered crucible. Wash with 0.2% I, 3–4 times with 3-ml. portions 60% EtOH contg. a few drops 0.2% I, and finally with EtOH and Et_2O. Dry in a vacuum desiccator.

K. O. Stern.

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RUSIYA, Zaur; KHURTSILAVA, Gigla; SMAKHARADZE, Kukuri; MIKAYA, Zurab; SIRADZE, Bondo; AVAZASHVILI, Guguli; PI.ITSKHALASHVILI, Pavle; TATUASHVILI, Ansor

Search goes on. Sov. profsoiuzy 18 no.5:16-18 Mr '62. (MIRA 15:3)

1. Zavod "Elektroavtomat", g. Tbilisi.
(Tiflis--Labor and laboring classes)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341020002-8

PIRTSKHALAISHVILI, S.Kh., kand.s-l'skokhoz.nauk

Research work on tea cultivation in principal tea growing provinces of China. Biul.VNIICHiSK no.2:154-163 '57. (MIRA 15:5)
(China--Tea research)

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L 18727-66 EWT(m)/EWA(d)/EWP(t) IJP(c) JD/JG

ACC NR: AP6005092 SOURCE CODE: UR/ 0251/65/040/003/0685/0692

AUTHOR: Tavadze, F. N. (Academician AN GruzSSR); Pirtskhalaishvili, V. A.; Khutsishvili, N. L.

ORG: Georgian Institute of Metallurgy (Gruzinskiy institut metallurgii)

TITLE: Effect of chromium on the structure and properties of nitrogen-containing austenitic chromium-manganese and chromium-manganese-nickel steels

SOURCE: AN GruzSSR. Soobshcheniya, v. 40, no. 3, 1965, 685-692

TOPIC TAGS: chromium, austenitic steel, nitrogen, plastic deformation, annealing, chromium steel, manganese steel

ABSTRACT: Specimens of specially melted alloys containing different proportions of technically pure Fe, electrolytic Cr (13.89-21.60%) and Mn (11.72-12.20%) and nitrided electrolytic Cr and Mn (with ~6% N) were hot-worked (annealing at 1200°C for 5 hr + immediate water quenching or cooling at room temperature over 24 hr) were tested for microhardness, hardness, electric resistance and deformation resistance. Microstructural examination and phase identification were based on the use of various etching agents. Findings: Cr-Mn steels containing 16% Mn, 16-18% Cr and 0.40-0.50% N display the highest deformation resistance at 700°C under a stress of 15 kg/mm^2. If the Cr content deviates from the 16-18% range, deformation resistance decreases

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ACC NR: AP6005092

sharply owing to the decrease in the Cr concentration of the γ-solid solution, appearance of porosity in ingots, and formation of a ferritic component in the structure. Cr-Mn steels containing up to 15.50% Cr display a higher deformation resistance when in quenched state compared with annealed state, whereas for the steels containing from 15.50 to 21.50% Cr this picture is reversed. Such an effect of hot working is apparently attributable to the difference in the rates of the aging process in the steels with a Cr content below and above 15.50%. The hardness and microhardness of the investigated Cr-Mn and Cr-Mn-Ni (~3% Ni) steels in quenched state are markedly higher than in annealed state. This may be due to the special character of the aging of these steels or to the low-temperature metastable transformation. The change in the deformation resistance of Cr-Mn-Ni steel at 700°C as a function of the concentration of Cr indicates that deformation resistance sharply increases in the presence of Cr concentrations of up to 17% but does not change appreciably above that limit. The presence of N in austenitic Cr-Mn and Cr-Mn-Ni steels in an amount not below its solubility limit in the γ-solid solution and not above its solubility limit in the melts of these steels markedly enhances their deformation resistance under conditions of prolonged exposure to high temperatures and loads. Orig. art. has: 2 tables, 4 figures.

SUB CODE: 11, 13, 20/ SUBM DATE: 05Feb65/ ORIG REF: 004/ OTH REF: 005

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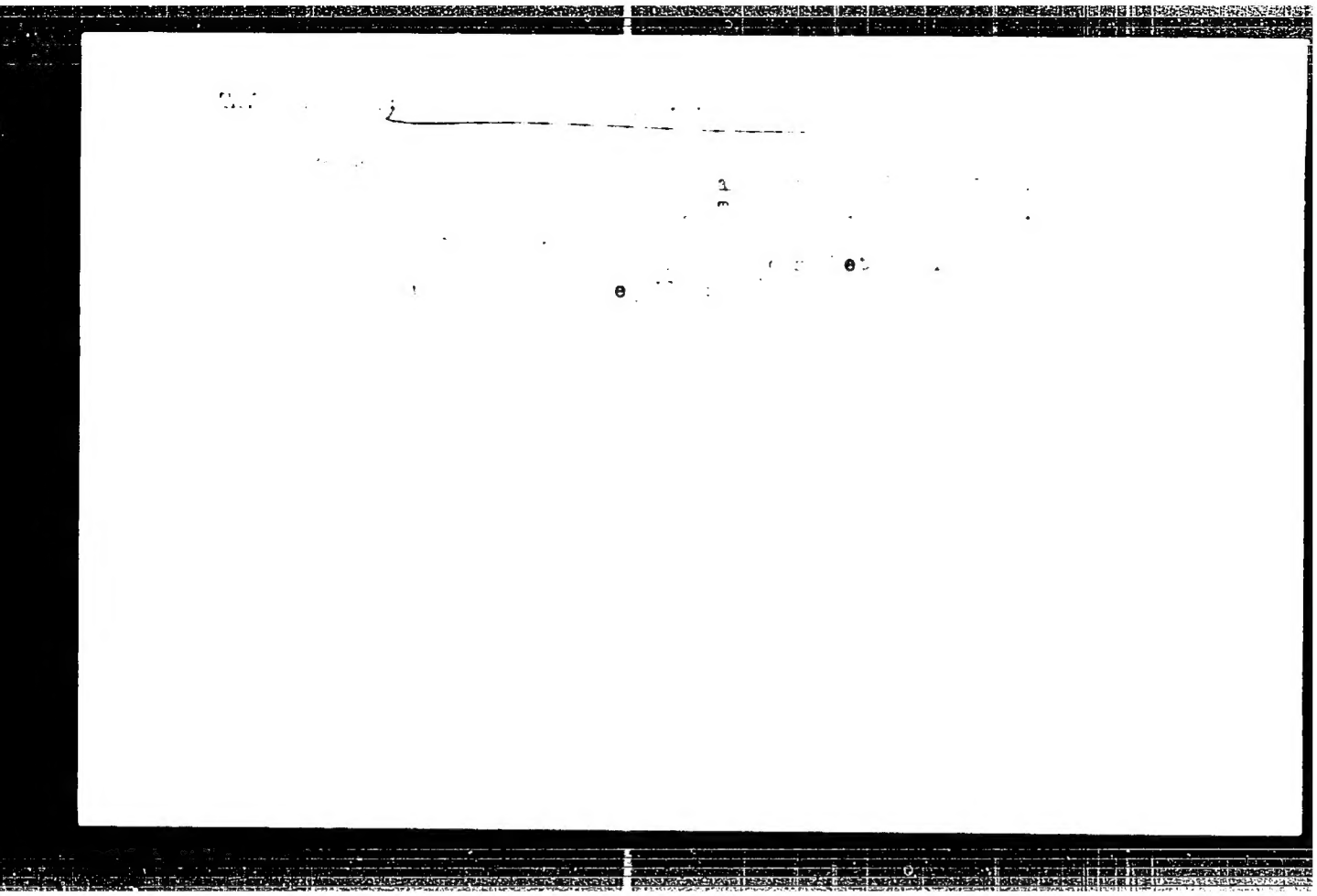

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TURTSKHALADZE, M.V.

4

[redacted] acids from terra rossa. [redacted] Trudy Inst. Khim., Akad. Nauk Gruzin. S.S.R. 11, 61-70(1962)(in Georgian; Russian summary); *Referat. Zhur., Khim.* 1964, No. 4G268.—The 2-stage extn. of Al_2O_3 burnt red earth of Western Georgia was studied. The earth was treated with either H_2SO_4 or HCl. The salts of Al and Fe obtained in the 1st stage were sepd. by adding untreated red earth and removing from soln. the major part of Fe salts by means of hydrolysis followed by coagulation of Fe hydroxides. The weak acid formed in the hydrolysis process extd. Al salts with only a small admixt. of Fe salts. The HCl process yielded purer Al salts than did the H_2SO_4 process. For final purification of Al salts they were crystd. from soln. as $AlNH_4$ alums which were subsequently converted into pure Al_2O_3 and $(NH_4)SO_4$. In the first stage of extn. of sesquioxides from red earth a highly disperaible amorphous SiO_2 was obtained.

M. Hosth

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KACHKYSHVILI [illegible], PIRTSKHALAVA, N.I., LOMIDZE I.I., [illegible].

Esters of diethylhexylboronic acid. Zhur. obshch. khim. 35 no.6:1084-1087 Je '65. (MIRA 18:7)

1. Tbilisskiy gosudarstvennyy universitet.

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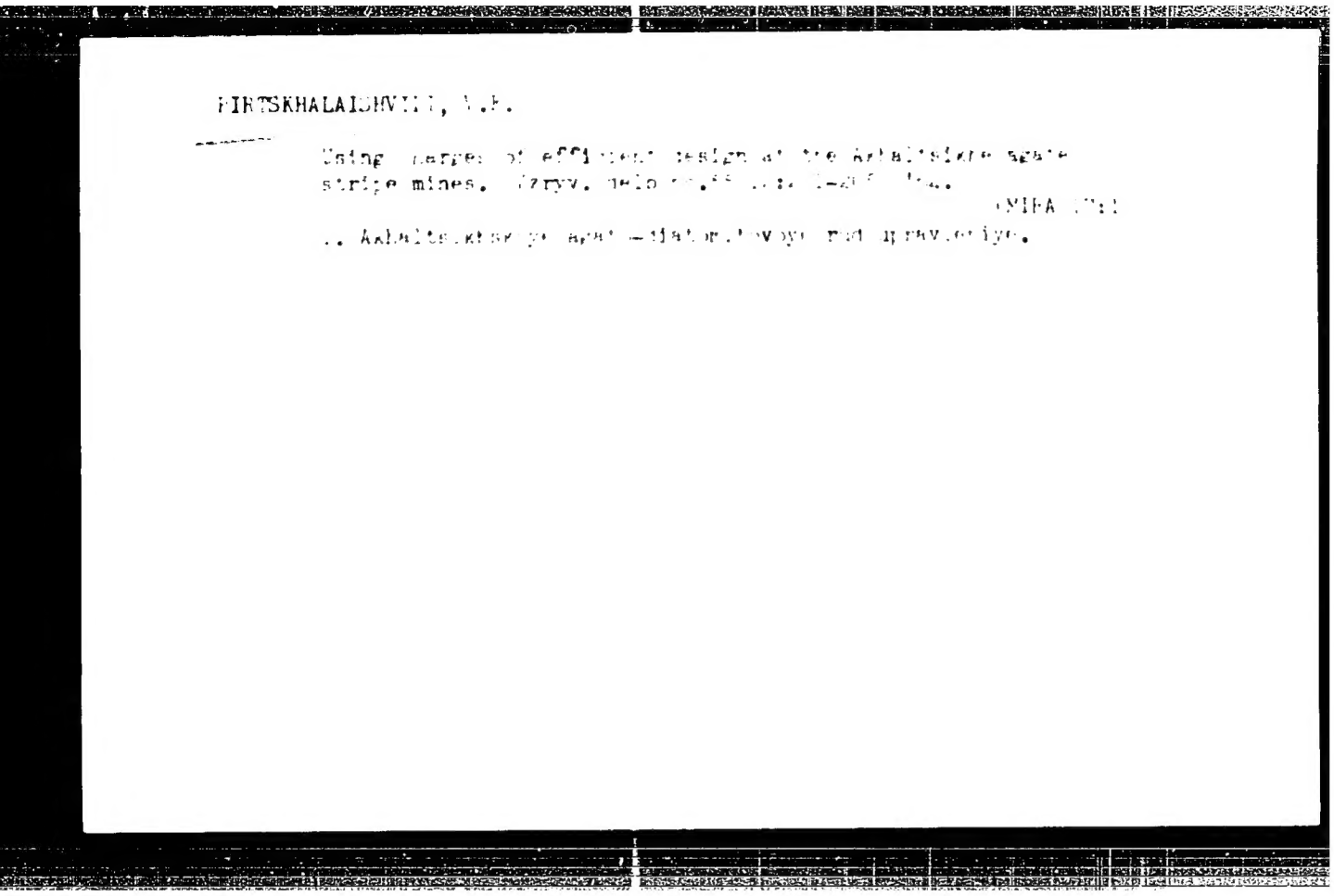

PIRTSKHALAISHVILI, V.P.

Using [illegible] of efficient design of the Arkhaliskiye series stripe mines. Izvyv. vuzov. Gor. zhur. [illegible]. (MIRA [illegible])

1. Arkhaliskiye gornyye [illegible]voyu [illegible] upravleniye.

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